



390879

9 2 3 2 2 0 0 0 3 5 5  
**CERCLA**  
**Environmental Priorities Initiative**  
**Preliminary Assessment**  
**Report**



**Illinois Environmental  
Protection Agency**  
P.O. Box 19276,  
Springfield, IL 62794-9276

*Confidential Material May be Enclosed*

## TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
Executive Summary	3
Site Map	9
Visual Site Inspection Form	10
Preliminary Assessment Form	24
Supporting Documentation	31

9 2 3 2 2 0 0 0 6 5 6

## EXECUTIVE SUMMARY

### Location

Petrochem Services, Incorporated can be found on Canal Bank Road N.E., Lemont, Cook County, Illinois which is between the Des Plaines River and the Chicago Sanitary and Ship Canal. Petrochem maintains a 35 year lease with the Metropolitan Sanitary District of Greater Chicago. The 17 acre facility is located in the N1/2 of Section 21, Township 37 N., Range 11 E. of the 3rd P.M.

### Current Operations

Petrochem Services, Incorporated is a service contracting company specializing in oil and chemical industry cleaning, maintenance and emergency spill response. This facility receives hazardous and non-hazardous wastes from off site and blends and treats these wastes to produce hazardous waste fuel, off-specification used oil and on-specification used oil (little to no on-spec used oil is generated). Sources of waste generated off site include cleaning tanker trucks and cleaning off site stationary tanks. This facility also operates an on site barge cleaning operation. They receive hazardous and non-hazardous wastes from the Illinois Environmental Protection Agency (IEPA Emergency Response Unit), the Illinois State Police Department of Criminal Investigations, Tox-Away (a government-sponsored Indianapolis, Indiana project to handle the shipment and disposal of hazardous household wastes) and generators, for temporary storage, which eventually go off site for incineration.

### Permitting Status/History

Petrochem qualified for Interim Status by reporting that the construction of the facility began in May of 1980. IEPA Air Permit # 82110046 was issued July 6, 1984 while Operating Permit # 1983-5-OP was issued on August 24, 1984. In October of 1984, the first load was processed by the new facility. On April 2, 1985, ILWD purchased 50% of Petrochem stock which changed representation on the board of directors. As a result, on July 22, 1985, Petrochem started accepting solvents on a commercial basis and not just for emergencies as stated in the Operating Permit. Supplemental Permit # 1986-116-SP was issued July 17, 1986 only to be revised on August 28, 1987 and again of March 10, 1988. Currently, Heritage Environmental, Incorporated has sole ownership of

the facility and in April of 1989, Petrochem's name will be changed to reflect this.

#### SWMU Identification

Petrochem's facility consists of five Solid Waste Management Units (SWMU's). One SWMU was destroyed by fire and another is to be built sometime in the near future.

#### Tank Storage and Treatment Area

A major portion of wastes is processed in a 173.33 feet by 71.33 feet area that is capable of acid/chemical treatment, heat treatment, filtration, blending, agitation, flocculation, air flotation, dehydration, centrifuge, water treatment, carbon treatment, solidification, distillation, neutralization, fixation, emulsification, separation, and burning hazardous waste fuels and used oil fuel in the industrial boiler. The area is concrete diked to contain 110% of the total capacity of the 23 tanks involved in this SWMU.

Thirteen of the 23 tanks are used to treat oil/hydro-carbon mixes. These vessels recycle the oil-water mixture or the hydrocarbon-water mixture first by separation of the aqueous phases. This is accomplished by any of a number of the process listed above which will finally render the used oil into industrial fuel and the hazardous hydrocarbons into hazardous waste fuels. The aqueous phases are separated and disposed of as non hazardous or listed hazardous waste. The solids are dewatered and shipped to a landfill as hazardous or non hazardous.

Six tanks are designated for independent storage and or treatment. The vessels are used to store waste and perform basic treatment, such as, blending, decanting of aqueous phase, and filtration. Two of these tanks have side entry mixers to allow blending of various hazardous waste into hazardous waste fuel for licensed hazardous waste fuel burners. The other four tanks are used to store waste or recycled products. The waste may be hazardous or non hazardous and is either hazardous waste fuel blend stock or is accumulated for truckload shipments to recyclers or disposal sites.

The four other tanks inside the diked area include a lime slurry storage tank, two boiler fuel tanks and a recirculation tank. Two process water storage tanks are located just outside the diked area. The volumes of all of the tanks can be seen in the Visual Site Inspection Report.

The hazardous (restricted) wastes are generated at the rate of 45,000 gallons per month. This is shipped off site approximately 3 times per week to Continental Cement

(Hanibal, Missouri) or Systech (Greencastle, Indiana) for use as fuel in cement kilns.

#### Drum/Container Storage Area

Another SWMU is the drum/container storage area adjacent to the tank dike. The drums are stored for off site treatment/disposal or on site treatment by the preceding SWMU. The drum/container storage area is also diked so that 110% of the capacity of 600 drums would be contained. The unloading dock is designed so that any spills could be contained and collected by a sump built into the asphalt drive at the base of the dock.

#### Containerized Storage in Van Trailers

The area with containerized storage in van trailers is also considered a SWMU and is approximately 50 feet by 70 feet. This area can accommodate 10 trailers containing about 80 drums per trailer and is situated on an asphalt pad with a 2 to 3 inch berm.

#### Shredder Unit

A shredder unit operation that started in March of 1988 was destroyed by fire on September 1, 1988. The cause of the fire is unknown and Petrochem's insurance company is currently investigating. The SWMU consisted of a 160 drum storage with five 550 gallon process liquid waste storage tanks to facilitate the Shred-pax AZ-15 unit. Aerosol and non aerosol consumer products were processed by this unit.

#### Roll-Off Boxes

Two roll-off boxes are used to discard debris from the other SWMU's. The 15 and 20 cubic yard roll-off boxes are used to store recyclable metals or other trash.

#### Drum Crusher Unit

The drum crusher unit is used to reduce the volume of old drums that would go to a recycler. This unit is located near the roll-off boxes.

#### Hazardous Materials Present

Petrochem is permitted to accept a wide variety of wastes. An analysis of each waste stream accepted from each generator is to be maintained on file. The types of waste for recovery include: non-halogenated aliphatics; non-halogenated aromatics; alcohols; ketones; halogenated aliphatics; esters; corrosive waste; non-hazardous used, waste, off-spec and surplus oil; hazardous used, waste, off-spec and surplus oils; and listed hazardous petroleum refinery wastes. The

types of waste for blending into supplemental fuels include: non-hazardous used, waste, off-spec and surplus oils; hazardous used, waste, off-spec and surplus oils; non-halogenated solvents and liquids; and washes and sludges from the formulation of ink. Wastes for bulking and or blending consist of the following: non-halogenated solvents and liquids; and halogenated solvents and liquids. The wastes treated include: corrosive waste for neutralization and off-specification or scrap commercial products which were shredded. Wastes for crushing include, "RCRA Empty" contains. A complete list of wastes can be found in the attached supplemental permit.

#### Compliance History

The facility has had no major compliance problems. In the last inspection on September 30, 1988, the only deficiency noted was that containers of restricted hazardous waste were not marked to identify the date they entered storage.

#### Visual Site Inspection

At 1:00 pm on January 9, 1989, a visual site inspection was conducted by Tim Murphy and Rob Watson of IEPA. Petrochem was represented by Michael J. Crafton, plant manager and Paul Zajec, plant foreman. The weather conditions were clear and breezy with a temperature of 24 degrees Fahrenheit.

We first walked through the vehicle maintenance shop and on to the laboratory. The shop, as well as the laboratory appeared to be clean and organized. No analysis were being conducted at the time of our visit. From the laboratory we exited the building and stood in the truck transfer area. Although this area is to be a containment area should a spill occur, we noticed the area was fairly level. We proceeded to walk around the tank process storage and treatment unit and discussed some of the processes. No cracks were noted in the 5 foot dike that surrounded the tanks. We continued on and inspected the drum/containerized storage area and the containerized storage in van trailer area. Southwest of the van trailer storage area, we saw where the shredder unit had been destroyed by fire. The debris from the fire had been cleaned up and removed or stored in the north corner of the property.

Drainage for the balance of the property is to the canal either by direct gradient or by a small ditch on the western portion of the property. The ditch could be blocked off in the event of a mishap. The capacity of the ditch is several thousand gallons.

Next, we looked at an area south of the main processing SWMU and northeast of the burned shredder unit where a new treatment system is to be built. Rob Watson who is reviewing

the permit for the fixation unit, wanted to look at the location. The inspection ended at 3:00 pm after a question and answer session in the offices.

#### Site Releases/Sampling

No samples have ever been taken of Petrochem's facility and a file review has come up with no complaints. There has been three reported minor releases, one release to the Canal and two air releases. On February 19, 1985, 150-200 gallons of 28% caustic was lost to the Sanitary and Ship Canal when a barge hose ruptured. A 95% clean-up was reported. In July of 1988, a reaction in a trailer sent approximately 5 pounds of lithium aluminum hydrate into the air. The other air release occurred in the September 1, 1988 shredder unit fire.

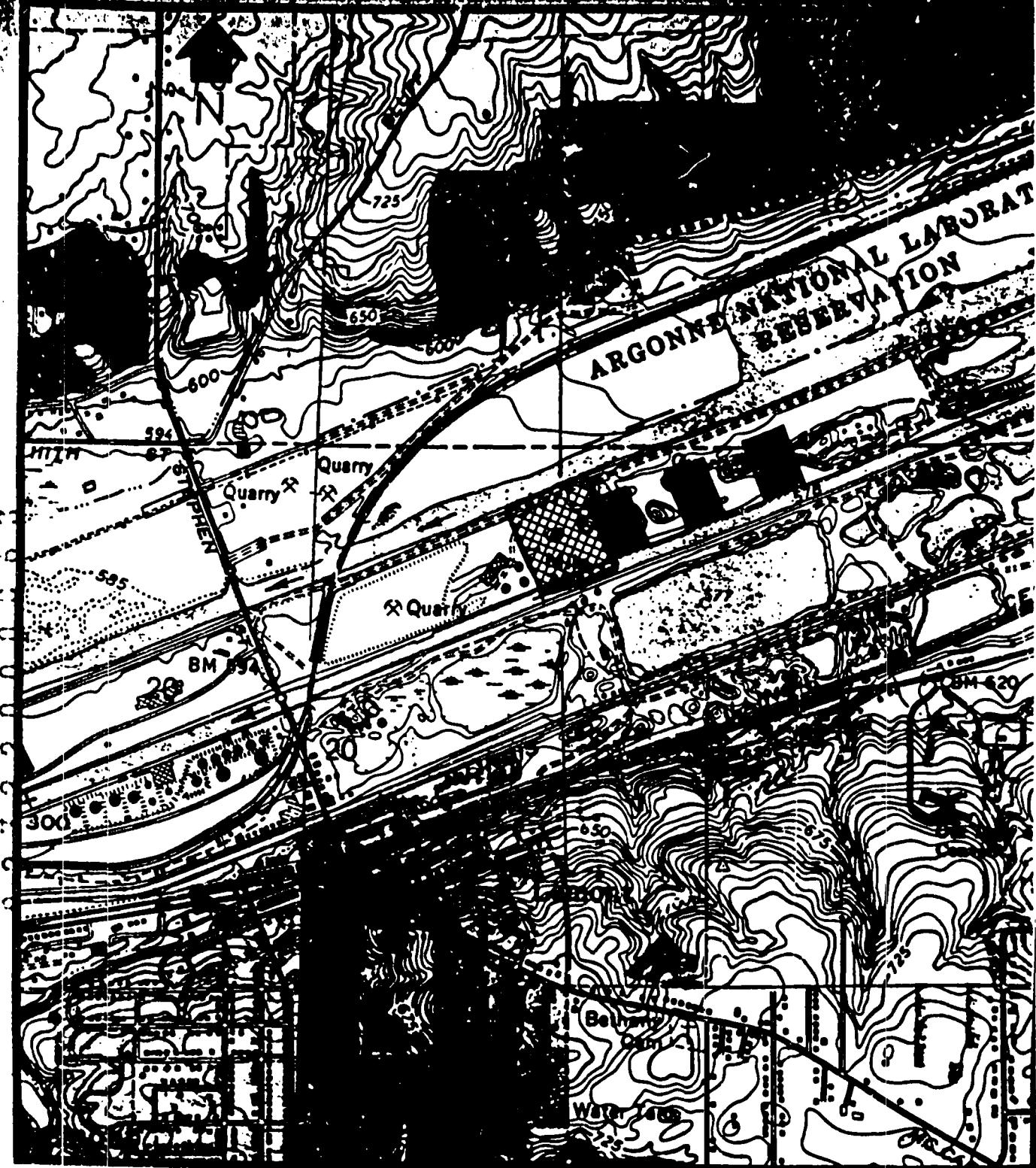
#### Targets

In a four mile radius of Petrochem, there are 19 public water wells. The nearest well is one mile south of the site in the village of Lemont. The well is one of three wells that supply the 5640 citizens of Lemont. The well is open from 128 feet to 241 feet in the fractured dolomite aquifer continuous with the aquifer underlying Petrochem. The other two wells are about a mile and a half away and are open in the deeper sandstone aquifer as are many of the other wells in the surrounding area.

Nearby surface waters in the area consist of the Sanitary and Ship Canal that bounds the southwest and southeast side of the property and the Des Plaines River. According to a recent Flood Insurance Rate Map of Cook County Illinois, Petrochem is located in an area of minimal flooding. A 100 year flood plain exists on the other side of the Des Plaines River. No public surface water intakes are located downstream.

Air releases are documented and have been discussed in the preceding section. Other than the two reported incidences, no ongoing air pollution episodes were noticed. The area within a half mile of the site is almost entirely industrialized.

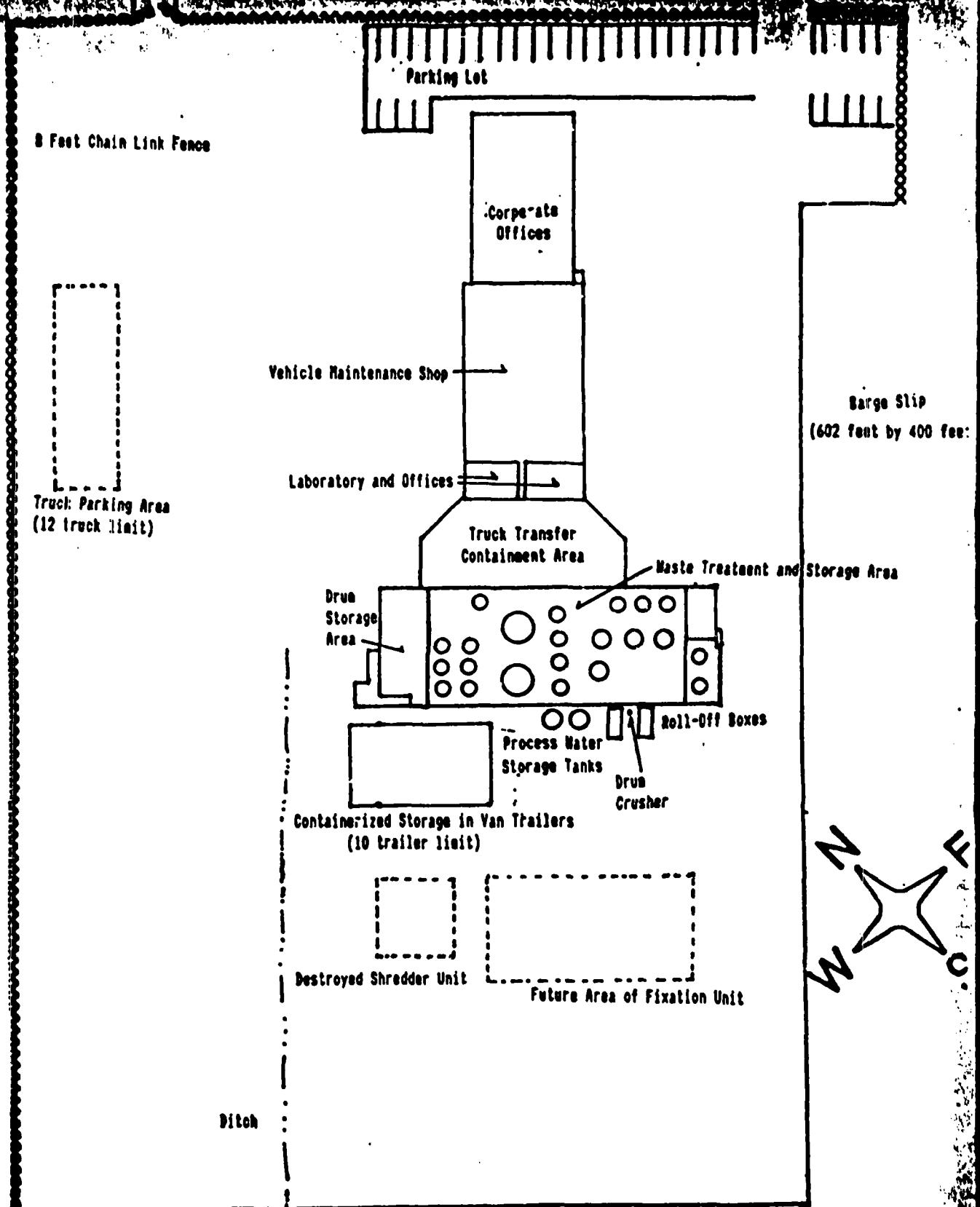
The direct contact route is held in check by an 8 foot fence around the site with the exception of the canal and barge slip areas where a 5 foot shear would be encountered.



USGS Topographic Series: Romeoville, IL and Sag Bridge, IL  
(53A revised 1980, 54B photorevised 1978)

Scale: 1 inch equals 1/4 mile

9 2 3 2 2 0 0 0 0 6 4



Chicago Sanitary and Ship Canal

**APPENDIX**  
**TABLE OF CONTENTS**

<u>Appendix</u>	<u>Page</u>
A Illinois Location Map	A-1
B Site 4-Mile Radius and Surface Water Map	B-1
C IEPA Site Photographs	C-1

9 2 3 2 2 0 0 0 0 0 5 7

LO311620007



**POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT**  
**PART 1 - SITE INFORMATION AND ASSESSMENT**

**IDENTIFICATION**  
STATION IDENTIFICATION  
ILD 086349264

**II. SITE NAME AND LOCATION**

(1) SITE NAME (legal name, or descriptive name of site)

Petrochem Services, Inc.

(2) STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER

Canal Bank Road N.E. (Pa. Box 337)

(3) CITY

Lemont

(4) STATE

(5) ZIP CODE

(6) COUNTY

IL

60439

Cook

(7) NEIGHBORHOOD CODE  
CODE 031

(8) COORDINATES LATITUDE

41 42 00.5

LONGITUDE

088 59 10.2

(9) SITE ADDRESS

Sag Bridge, IL

N4137.5 - W8752.5/25

54B

(10) DIRECTIONS TO SITE (using road names and distances)

From Interstate 55, take Lemont Road south 2.5 miles to Canal Bank Road N.E. (gravel road). Site is located 3.5 miles east of Lemont Road (Stephen St.) between the Chicago Sanitary and Ship Canal and the Des Plaines River

**III. RESPONSIBLE PARTIES**

(1) OWNER (Name, mailing address)

Heritage Environmental Services, Inc.

(2) STREET (Name, mailing address)

7901 West Morris Street

(3) CITY

Indianapolis

(4) STATE

(5) ZIP CODE

IN

46231

(6) TELEPHONE NUMBER

(317)243-0811

(7) OPERATOR (Name, mailing address)

(8) STREET (Name, mailing address)

(9) CITY

(10) STATE

(11) ZIP CODE

(12) TELEPHONE NUMBER

(13) TYPE OF OWNERSHIP (Check one)

 A. PRIVATE  B. FEDERAL:

Agency name

C. STATE D. COUNTY E. MUNICIPAL

 C. F. OTHER:

Agency name

F. G. UNKNOWN

(14) OWNER/OPERATOR NOTIFICATION ON FILE (Check one)

 A. RCRA 3001 DATE RECEIVED: 9/6/83

Month

Year

B. UNCONTROLLED WASTE SITE REGISTRATION DATE RECEIVED: 1/1/87

Month

Year

C. NONE

**IV. CHARACTERIZATION OF POTENTIAL HAZARD**

(1) ON-SITE INSPECTION

BY WHICH

 A. YES DATE 10/27/83 B. EPA CONTRACTOR C. STATE D. OTHER CONTRACTOR B. NO DATE 3/26/86 C. LOCAL HEALTH OFFICIAL D. F. OTHER

Agency name

7/30/88 6/26/88

CONTRACTOR NAMES

(2) ON-SITE STATUS (Check one)

 A. ACTIVE  B. INACTIVE  C. UNKNOWN

(3) YEARS OF OPERATION

1977 Present

C. UNKNOWN

D. UNKNOWN

(4) DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED  
This ICRA regulated facility accepts a wide variety of used oils, sludges, solvents, etc. for treatment

(5) DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

None noted or observed

**V. PRIORITY ASSESSMENT**

(1) PRIORITY FOR INSPECTION (Check one. If none or unclear is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Treatment)

 A. HIGH B. MEDIUM C. LOW D. NONE

Inspection required pending

Inspection required

Report on time available basis

No further action needed, complete current disposition form

**VI. INFORMATION AVAILABLE FROM**

(1) CONTACT

Michael J. Crafton

(2) ORGANIZATION

Heritage Environmental Services, Inc.

(3) TELEPHONE NUMBER

(317)243-0811

(4) PERSON RESPONSIBLE FOR ASSESSMENT

Timothy J. Murphy

(5) AGENCY

IEPA

(6) ORGANIZATION

RPMs

(7) TELEPHONE NUMBER

(219)1785-8737

(8) DATE

1/9/89

Month Year

EPA FORM 2070-120-011

**GEPA**
**POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT  
PART 2 - WASTE INFORMATION**
**I. IDENTIFICATION**  
 01 STATE 02 SITE NUMBER  
**ILD 085349264**
**II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS**

01 PHYSICAL STATES		02 WASTE QUANTITY AT SITE	03 WASTE CHARACTERISTICS
<input checked="" type="checkbox"/> SOLID	<input checked="" type="checkbox"/> POWDER, PINEAS	02 WASTE QUANTITY AT SITE UNKNWN TONS	03 WASTE CHARACTERISTICS UNKNOWN TOXIC CORROSIVE RADIOACTIVE PERSISTENT
<input checked="" type="checkbox"/> LIQUID	<input checked="" type="checkbox"/> LIQUID GASES	CUBIC YARDS NO OF DRUMS	<input checked="" type="checkbox"/> SOLUBLE INFLAMMABLE VOLATILE
<input checked="" type="checkbox"/> SLUDGE			<input checked="" type="checkbox"/> HIGHLY VOLATILE EXPLOSIVE REACTIVE INCOMPATIBLE N/A NOT APPLICABLE
<input checked="" type="checkbox"/> OTHER			

**III. WASTE TYPE**

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	UNKNOWN		
OLW	OILY WASTE	UNKNOWN		
BOL	SOLVENTS	UNKNOWN		
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS	UNKNOWN		
IOC	INORGANIC CHEMICALS			
ACD	ACIDS	UNKNOWN		
BAS	BASES	UNKNOWN		
MES	HEAVY METALS			

**IV. HAZARDOUS SUBSTANCES** (See Addendum for more frequency from CAS numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
ULW	engine lube oils				
OLW	transmission fluids				
OLW	hydraulic oils		1. storage		
OLW	insulating fluids and coolant oils		2. treatment		
OLW	metal working fluids		3. blending into fuels		
OLW	turbine oils		4. recycling		
OLW	grease oils		5. blending for off-site incineration		
OLW	greases				
OLW	distillate and residual fuel oil		6. shredding for volume reduction		
OLW	tallow				
OLW	vegetable oils				
OLW	paraffins				
OLW	mineral oils				
OLW	petroleum refining intermediates				
OLW	asphalt				
OLW	calcium naphthalene oil				

**V. FEEDSTOCKS** (See Addendum for CAS numbers)

01 CATEGORY	02 FEEDSTOCK NAME	03 CAS NUMBER	01 CATEGORY	02 FEEDSTOCK NAME	03 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

**VI. SOURCES OF INFORMATION** (See Addendum for CAS numbers)

JH-Nois Environmental Protection Agency File 60311620007

## IV. HAZARDOUS SUBSTANCES

O1 CATEGORY	O2 SUBSTANCE NAME	O3 CAS NUMBER	O4 STORAGE/DISPOSAL METHOD	O5 CONCENTRATION	O6 LIMITS OF CONCENTRATION
OHW	oil/water separator wastes				
OHW	sludge oil wastes				
OHW	oily washwaters from cleaning				
OHW	spill clean-up residues				
OHW	pipeline interfaces and transmixers				
SOL	mineral spirits				
SOL	heptane				
SOL	paraffin solvents				
SOL	plasticizers				
SOL	styrene				
SOL	jet fuel				
SOL	gasoline				
SOL	heptane				
SOL	cyclohexane	110827			
SOL	hexane				
SOL	kerosene				
SOL	lacquer thinner				
SOL	standard's solvent		1 storage		
SOL	terpenes		2 treatment		
SOL	isoprene	78795	3 blending into fuels		
SOL	propane		4 recycling		
SOL	hexene's		5 blending for off-site incineration		
SOL	isopentane		6 shredding for volume reduction		
SOL	methyl cyclohexane				
SOL	isooctane				
SOL	tetrachloroethylene	127184			
SOL	trichloroethylene	79016			
SOL	methylene chloride	75092			
SOL	1,1,1-trichloroethane	71556			
SOL	carbon tetrachloride	56235			
SOL	chlorinated fluorocarbons				
SOL	chlorobenzene	108907			
SOL	1,1,2-trichloro-1,2,2-trifluoroethane	76131			
SOL	orthodichlorobenzene				
SOL	trichlorofluoromethane	75694			
SOL	dichlorobenzene	25321226			
SOL	xylenes				
SOL	benzene	71432			
SOL	toluene				
SOL	cumene	98828			
SOL	creosols	1319173			
SOL	creosolic acid	1319773			
SOL	Nitrobenzene				
SOL	ethyl benzene	100414			
SOL	ethyl acetate	141786			
SOL	Vinyl acetate				
SOL	diethyl phthalate				
SOL	diethyl phthalate	84662			

## IV. HAZARDOUS SUBSTANCES

B1 CATEGORY	B2 SUBSTANCE NAME	B3 CAS NUMBER	B4 STORAGE DISPOSAL METHOD	B5 CONCENTRATION	B6 MEASURE OF CONCENTRATION
SOL	methyl acetate				
SOL	isobutyl acetate				
SOL	isopropyl acetate				
SOL	isooamyl acetate	123922			
SOL	amyl acetate	628637			
SOL	ethyl/methyl acrylate				
SOL	ethyl acrylate	140885			
SOL	ethanol				
SOL	ethylene glycol				
SOL	butanol	71363			
SOL	isobutyl alcohol	78831			
SOL	methanol				
SOL	isoamyl alcohol				
SOL	tert amyl alcohol				
SOL	cyclohexanol				
SOL	diacetone alcohol				
SOL	2-methyl-1-butanol				
SOL	2-methyl-1-hexanol		1. Storage		
SOL	ethyl butanol		2. treatment		
SOL	isopropyl alcohol		3. blending into fuels		
SOL	2-methyl-1-2-butanol		4. recycling		
SOL	propanol		5. blending for off-site incineration		
SOL	2-methyl-1-propanol	78831	6. shredding for volume reduction		
SOL	N-pentanol				
SOL	acetone	67141			
SOL	methyl ethyl ketone	78933			
SOL	ethyl isobutyl ketone	108191			
SOL	diacetone alcohol				
SOL	acetophenone	98882			
SOL	diisobutyl ketones				
SLU	DAF float - K048				
SLU	Slip oil emulsion solids - K049				
SLU	heat exchange bundle cleaning				
SLU	sludge - K050				
SLU	API separator (leaded) - K051				
SLU	tank bottoms (leaded) - K052				
SLU	ink formulation waste - K086				
BAS	sodium hydroxide	1310737			
BAS	potassium hydroxide				
BAS	wastewater and bottoms containing NaCl and KOH				
ACD	sulfuric acid				
ACD	phosphoric acid				
ACD	wastewaters and bottoms containing sulfuric and phosphoric acid				
ACC	soaps and detergents				
BAG	alkaline cleaners				
ACC	air fresheners				

#### **IV. HAZARDOUS SUBSTANCES**

POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT

## PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

L IDENTIFICATION  
S STATE OR PROV.  
L.D. 06534-9264

## II. HAZARDOUS CONDITIONS AND INCIDENTS

01  A. GROUNDWATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

None noted or observed

02  OBSERVED (DATE: \_\_\_\_\_)

04 NARRATIVE DESCRIPTION

L: POTENTIAL

C: ALLEGED

01  B. SURFACE WATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

None noted or observed

02  OBSERVED (DATE: \_\_\_\_\_)

04 NARRATIVE DESCRIPTION

L: POTENTIAL

C: ALLEGED

01  C. CONTAMINATION OF AIR

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

None noted or observed

02  OBSERVED (DATE: \_\_\_\_\_)

04 NARRATIVE DESCRIPTION

L: POTENTIAL

C: ALLEGED

01  D. FIRE/EXPLOSIVE CONDITIONS

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

None noted or observed

02  OBSERVED (DATE: \_\_\_\_\_)

04 NARRATIVE DESCRIPTION

L: POTENTIAL

C: ALLEGED

01  E. DIRECT CONTACT

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

None noted or observed

02  OBSERVED (DATE: \_\_\_\_\_)

04 NARRATIVE DESCRIPTION

L: POTENTIAL

C: ALLEGED

01  F. CONTAMINATION OF SOIL

03 AREA POTENTIALLY AFFECTED: \_\_\_\_\_

No soil exists on site, facility sits directly on top of a fractured dolomite and sandstone deposit.

02  OBSERVED (DATE: \_\_\_\_\_)

04 NARRATIVE DESCRIPTION

L: POTENTIAL

C: ALLEGED

01  G. DRINKING WATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

None noted or observed

02  OBSERVED (DATE: \_\_\_\_\_)

04 NARRATIVE DESCRIPTION

L: POTENTIAL

C: ALLEGED

01  H. WORKER EXPOSURE/HURRY

03 WORKER'S POTENTIALLY AFFECTED: \_\_\_\_\_

None noted or observed

02  OBSERVED (DATE: \_\_\_\_\_)

04 NARRATIVE DESCRIPTION

L: POTENTIAL

C: ALLEGED

01  I. POPULATION EXPOSURE/HURRY

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

None noted or observed

02  OBSERVED (DATE: \_\_\_\_\_)

04 NARRATIVE DESCRIPTION

L: POTENTIAL

C: ALLEGED

POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT

## PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

L IDENTIFICATION  
01 STANDARDS REFERENCED  
ILD 085349264

## B. HAZARDOUS CONDITIONS AND INCIDENTS

- 01
- 
- J. DAMAGE TO FLORA
- 
- 04 NARRATIVE DESCRIPTION

02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED

None noted or observed

- 01
- 
- K. DAMAGE TO FAUNA
- 
- 04 NARRATIVE DESCRIPTION

02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED

None noted or observed

- 01
- 
- L. CONTAMINATION OF FOOD CHAIN
- 
- 04 NARRATIVE DESCRIPTION

02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED

None noted or observed

- 01
- 
- M. UNSTABLE CONFINEMENT OF WASTES

02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED

- 03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

04 NARRATIVE DESCRIPTION

None noted or observed

- 01
- 
- N. DAMAGE TO OPPONENT PROPERTY
- 
- 04 NARRATIVE DESCRIPTION

02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED

None noted or observed

- 01
- 
- O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPS
- 
- 04 NARRATIVE DESCRIPTION

02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED

None noted or observed

- 01
- 
- P. ILLEGAL/UNAUTHORIZED DUMPING
- 
- 04 NARRATIVE DESCRIPTION

02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED

None noted or observed

## C. DESCRIPTION (IF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS)

None noted or observed

## E. TOTAL POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

## IV. COMMENTS

Visual site investigation was conducted 7-8-89 with Rob Watson of IEPA permit section. Michael Crafton, plant manager for Heritage Environmental Services, Inc. (owner of Petrochim) was interviewed along with Paul Zajec, plant foreman. RCRA part B of the permit was discussed as well as other plant activities.

## V. SOURCES OF INFORMATION (check all applicable, e.g., news media, reports, research)

IEPA Division of Land Pollution Control file L031162 0007

VISUAL SITE INSPECTION REPORT

9 2 3 2 2 0 0 3 6 5

Facility Name: Petrochem Services, Inc. EPA I.D. Number: ILD085349264  
Location Address: Canal Bank Rd. N.E. TDD Number: \_\_\_\_\_  
Lemont, IL 60439 (Cook County) HSTS Number: \_\_\_\_\_  
Facility Contact>Title: Michael J. Crafton, Plant Manager  
Phone Number: (312) 739-1150  
Date of Inspection: January 9, 1989 Time of Inspection: 13 00  
Weather: clear, breezy, 24° F

Person(s) Interviewed	Organization	Title
<u>Michael J. Crafton</u>	<u>Heritage Environmental Services, Inc.</u>	<u>Plant Manager</u>
<u>Paul Zajec</u>	<u>Petrochem Services, Inc.</u>	<u>Plant Foreman</u>

Inspector(s)	Organization	Title
<u>Timothy J. Murphy</u>	<u>IEPA Remedial Project Management Section</u>	<u>Environmental Specialist</u>
<u>Rob Watson</u>	<u>IEPA Permit Section</u>	<u>Environmental Engineer</u>

Facility Description: Petrochem Services, Inc. is a service contracting company specializing in oil and chemical industry cleaning, maintenance and emergency spill response. The facility engages in various storage and treatment technologies of hazardous and non-hazardous waste which result in the production of recycled materials, fuels, hazardous waste fuels, off spec oil and enhanced disposal streams. Petrochem also serves as a generator, transporter, marketer and burner of hazardous waste fuels. The facility consists of corporate offices, a 70' x 100' vehicle maintenance shop, a laboratory, a 130' truck transfer and containment area, a 173.33' x 71.33' 23 tank storage and treatment area, 2 28,481 gallon process water storage tanks, a 30.67' x 71.33' 600 drum storage area, 8

Specific equipment included 15 cubic yard and 3 x 20 cubic yard storage roll-off boxes, a 10 ton trailer storage area, a plate and frame filter press unit, 2 heat exchangers, a boiler, a denim crusher, and all corresponding sumps, pumps, piping, controls, filters, and appurtenances. J Petracchein also had a shed-pax AZ-15 shredder with conveyor, fire suppression, exhaust and liquid collection system which had a 160 drum storage area and 3 550 gallon process liquid waste storage tanks. This system burned up Sept. 1, 1988.

9 2 3 2 2 0 0 0 3 6 7

SOLID WASTE MANAGEMENT UNIT EVALUATION

SMU No.: 1 Type: Tank Storage and Treatment Area

Unit Description: The 23 storage tanks or vessels used at the facility are constructed of materials compatible with materials held in storage. The vessels are located inside of a concrete dike designed to contain 110% of the total capacity of all vessels. Processes include acid/chemical treatment, heat exchanger, filtration, blending, agitation, flocculation, air floatation, dehydration, centrifuge, water treatment, carbon treatment, solidification, distillation, Neutralization, fixation, emulsification, separations, and burn hazardous waste fuels and used oil fuel in the industrial boiler. A list of the tanks is on the following page.

1  
2  
3 Date of Start Up: 8-24-84

2 Date of Closure: active

9 Method of Closure: \_\_\_\_\_  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100  
101  
102  
103  
104  
105  
106  
107  
108  
109  
110  
111  
112  
113  
114  
115  
116  
117  
118  
119  
120  
121  
122  
123  
124  
125  
126  
127  
128  
129  
130  
131  
132  
133  
134  
135  
136  
137  
138  
139  
140  
141  
142  
143  
144  
145  
146  
147  
148  
149  
150  
151  
152  
153  
154  
155  
156  
157  
158  
159  
160  
161  
162  
163  
164  
165  
166  
167  
168  
169  
170  
171  
172  
173  
174  
175  
176  
177  
178  
179  
180  
181  
182  
183  
184  
185  
186  
187  
188  
189  
190  
191  
192  
193  
194  
195  
196  
197  
198  
199  
200  
201  
202  
203  
204  
205  
206  
207  
208  
209  
210  
211  
212  
213  
214  
215  
216  
217  
218  
219  
220  
221  
222  
223  
224  
225  
226  
227  
228  
229  
230  
231  
232  
233  
234  
235  
236  
237  
238  
239  
240  
241  
242  
243  
244  
245  
246  
247  
248  
249  
250  
251  
252  
253  
254  
255  
256  
257  
258  
259  
260  
261  
262  
263  
264  
265  
266  
267  
268  
269  
270  
271  
272  
273  
274  
275  
276  
277  
278  
279  
280  
281  
282  
283  
284  
285  
286  
287  
288  
289  
290  
291  
292  
293  
294  
295  
296  
297  
298  
299  
300  
301  
302  
303  
304  
305  
306  
307  
308  
309  
310  
311  
312  
313  
314  
315  
316  
317  
318  
319  
320  
321  
322  
323  
324  
325  
326  
327  
328  
329  
330  
331  
332  
333  
334  
335  
336  
337  
338  
339  
340  
341  
342  
343  
344  
345  
346  
347  
348  
349  
350  
351  
352  
353  
354  
355  
356  
357  
358  
359  
360  
361  
362  
363  
364  
365  
366  
367  
368  
369  
370  
371  
372  
373  
374  
375  
376  
377  
378  
379  
380  
381  
382  
383  
384  
385  
386  
387  
388  
389  
390  
391  
392  
393  
394  
395  
396  
397  
398  
399  
400  
401  
402  
403  
404  
405  
406  
407  
408  
409  
410  
411  
412  
413  
414  
415  
416  
417  
418  
419  
420  
421  
422  
423  
424  
425  
426  
427  
428  
429  
430  
431  
432  
433  
434  
435  
436  
437  
438  
439  
440  
441  
442  
443  
444  
445  
446  
447  
448  
449  
4410  
4411  
4412  
4413  
4414  
4415  
4416  
4417  
4418  
4419  
4420  
4421  
4422  
4423  
4424  
4425  
4426  
4427  
4428  
4429  
4430  
4431  
4432  
4433  
4434  
4435  
4436  
4437  
4438  
4439  
4440  
4441  
4442  
4443  
4444  
4445  
4446  
4447  
4448  
4449  
44410  
44411  
44412  
44413  
44414  
44415  
44416  
44417  
44418  
44419  
44420  
44421  
44422  
44423  
44424  
44425  
44426  
44427  
44428  
44429  
44430  
44431  
44432  
44433  
44434  
44435  
44436  
44437  
44438  
44439  
44440  
44441  
44442  
44443  
44444  
44445  
44446  
44447  
44448  
44449  
444410  
444411  
444412  
444413  
444414  
444415  
444416  
444417  
444418  
444419  
444420  
444421  
444422  
444423  
444424  
444425  
444426  
444427  
444428  
444429  
444430  
444431  
444432  
444433  
444434  
444435  
444436  
444437  
444438  
444439  
444440  
444441  
444442  
444443  
444444  
444445  
444446  
444447  
444448  
444449  
4444410  
4444411  
4444412  
4444413  
4444414  
4444415  
4444416  
4444417  
4444418  
4444419  
4444420  
4444421  
4444422  
4444423  
4444424  
4444425  
4444426  
4444427  
4444428  
4444429  
4444430  
4444431  
4444432  
4444433  
4444434  
4444435  
4444436  
4444437  
4444438  
4444439  
4444440  
4444441  
4444442  
4444443  
4444444  
4444445  
4444446  
4444447  
4444448  
4444449  
44444410  
44444411  
44444412  
44444413  
44444414  
44444415  
44444416  
44444417  
44444418  
44444419  
44444420  
44444421  
44444422  
44444423  
44444424  
44444425  
44444426  
44444427  
44444428  
44444429  
44444430  
44444431  
44444432  
44444433  
44444434  
44444435  
44444436  
44444437  
44444438  
44444439  
44444440  
44444441  
44444442  
44444443  
44444444  
44444445  
44444446  
44444447  
44444448  
44444449  
444444410  
444444411  
444444412  
444444413  
444444414  
444444415  
444444416  
444444417  
444444418  
444444419  
444444420  
444444421  
444444422  
444444423  
444444424  
444444425  
444444426  
444444427  
444444428  
444444429  
444444430  
444444431  
444444432  
444444433  
444444434  
444444435  
444444436  
444444437  
444444438  
444444439  
444444440  
444444441  
444444442  
444444443  
444444444  
444444445  
444444446  
444444447  
444444448  
444444449  
4444444410  
4444444411  
4444444412  
4444444413  
4444444414  
4444444415  
4444444416  
4444444417  
4444444418  
4444444419  
4444444420  
4444444421  
4444444422  
4444444423  
4444444424  
4444444425  
4444444426  
4444444427  
4444444428  
4444444429  
4444444430  
4444444431  
4444444432  
4444444433  
4444444434  
4444444435  
4444444436  
4444444437  
4444444438  
4444444439  
4444444440  
4444444441  
4444444442  
4444444443  
4444444444  
4444444445  
4444444446  
4444444447  
4444444448  
4444444449  
44444444410  
44444444411  
44444444412  
44444444413  
44444444414  
44444444415  
44444444416  
44444444417  
44444444418  
44444444419  
44444444420  
44444444421  
44444444422  
44444444423  
44444444424  
44444444425  
44444444426  
44444444427  
44444444428  
44444444429  
44444444430  
44444444431  
44444444432  
44444444433  
44444444434  
44444444435  
44444444436  
44444444437  
44444444438  
44444444439  
44444444440  
44444444441  
44444444442  
44444444443  
44444444444  
44444444445  
44444444446  
44444444447  
44444444448  
44444444449  
444444444410  
444444444411  
444444444412  
444444444413  
444444444414  
444444444415  
444444444416  
444444444417  
444444444418  
444444444419  
444444444420  
444444444421  
444444444422  
444444444423  
444444444424  
444444444425  
444444444426  
444444444427  
444444444428  
444444444429  
444444444430  
444444444431  
444444444432  
444444444433  
444444444434  
444444444435  
444444444436  
444444444437  
444444444438  
444444444439  
444444444440  
444444444441  
444444444442  
444444444443  
444444444444  
444444444445  
444444444446  
444444444447  
444444444448  
444444444449  
4444444444410  
4444444444411  
4444444444412  
4444444444413  
4444444444414  
4444444444415  
4444444444416  
4444444444417  
4444444444418  
4444444444419  
4444444444420  
4444444444421  
4444444444422  
4444444444423  
4444444444424  
4444444444425  
4444444444426  
4444444444427  
4444444444428  
4444444444429  
4444444444430  
4444444444431  
4444444444432  
4444444444433  
4444444444434  
4444444444435  
4444444444436  
4444444444437  
4444444444438  
4444444444439  
4444444444440  
4444444444441  
4444444444442  
4444444444443  
4444444444444  
4444444444445  
4444444444446  
4444444444447  
4444444444448  
4444444444449  
44444444444410  
44444444444411  
44444444444412  
44444444444413  
44444444444414  
44444444444415  
44444444444416  
44444444444417  
44444444444418  
44444444444419  
44444444444420  
44444444444421  
44444444444422  
44444444444423  
44444444444424  
44444444444425  
44444444444426  
44444444444427  
44444444444428  
44444444444429  
44444444444430  
44444444444431  
44444444444432  
44444444444433  
44444444444434  
44444444444435  
44444444444436  
44444444444437  
44444444444438  
44444444444439  
44444444444440  
44444444444441  
44444444444442  
44444444444443  
44444444444444  
44444444444445  
44444444444446  
44444444444447  
44444444444448  
44444444444449  
444444444444410  
444444444444411  
444444444444412  
444444444444413  
444444444444414  
444444444444415  
444444444444416  
444444444444417  
444444444444418  
444444444444419  
444444444444420  
444444444444421  
444444444444422  
444444444444423  
444444444444424  
444444444444425  
444444444444426  
444444444444427  
444444444444428  
444444444444429  
444444444444430  
444444444444431  
444444444444432  
444444444444433  
444444444444434  
444444444444435  
444444444444436  
444444444444437  
444444444444438  
444444444444439  
444444444444440  
444444444444441  
444444444444442  
444444444444443  
444444444444444  
444444444444445  
444444444444446  
444444444444447  
444444444444448  
444444444444449  
4444444444444410  
4444444444444411  
4444444444444412  
4444444444444413  
4444444444444414  
4444444444444415  
4444444444444416  
4444444444444417  
4444444444444418  
4444444444444419  
4444444444444420  
4444444444444421  
4444444444444422  
4444444444444423  
4444444444444424  
4444444444444425  
4444444444444426  
4444444444444427  
4444444444444428  
4444444444444429  
4444444444444430  
4444444444444431  
4444444444444432  
4444444444444433  
4444444444444434  
4444444444444435  
4444444444444436  
4444444444444437  
4444444444444438  
4444444444444439  
4444444444444440  
4444444444444441  
4444444444444442  
4444444444444443  
4444444444444444  
4444444444444445  
4444444444444446  
4444444444444447  
4444444444444448  
4444444444444449  
44444444444444410  
44444444444444411  
44444444444444412  
44444444444444413  
44444444444444414  
44444444444444415  
44444444444444416  
44444444444444417  
44444444444444418  
44444444444444419  
44444444444444420  
44444444444444421  
44444444444444422  
44444444444444423  
44444444444444424  
44444444444444425  
44444444444444426  
44444444444444427  
44444444444444428  
44444444444444429  
44444444444444430  
44444444444444431  
44444444444444432  
44444444444444433  
44444444444444434  
44444444444444435  
44444444444444436  
44444444444444437  
44444444444444438  
44444444444444439  
44444444444444440  
44444444444444441  
44444444444444442  
44444444444444443  
44444444444444444  
44444444444444445  
44444444444444446  
44444444444444447  
44444444444444448  
44444444444444449  
444444444444444410  
444444444444444411  
444444444444444412  
444444444444444413  
444444444444444414  
444444444444444415  
444444444444444416  
444444444444444417  
444444444444444418  
444444444444444419  
444444444444444420  
444444444444444421  
444444444444444422  
444444444444444423  
444444444444444424  
444444444444444425  
444444444444444426  
444444444444444427  
444444444444444428  
444444444444444429  
444444444444444430  
444444444444444431  
444444444444444432  
444444444444444433  
444444444444444434  
444444444444444435  
444444444444444436  
444444444444444437  
444444444444444438  
444444444444444439  
444444444444444440  
444444444444444441  
444444444444444442  
444444444444444443  
444444444444444444  
444444444444444445  
444444444444444446  
444444444444444447  
444444444444444448  
444444444444444449  
4444444444444444410  
4444444444444444411  
4444444444444444412  
4444444444444444413  
4444444444444444414  
4444444444444444415  
4444444444444444416  
4444444444444444417  
4444444444444444418  
4444444444444444419  
4444444444444444420  
4444444444444444421  
4444444444444444422  
4444444444444444423  
4444444444444444424  
4444444444444444425  
4444444444444444426  
4444444444444444427  
4444444444444444428  
4444444444444444429  
4444444444444444430  
4444444444444444431  
4444444444444444432  
4444444444444444433  
4444444444444444434  
4444444444444444435  
4444444444444444436  
4444444444444444437  
4444444444444444438  
4444444444444444439  
4444444444444444440  
4444444444444444441  
4444444444444444442  
4444444444444444443  
4444444444444444444  
4444444444444444445  
4444444444444444446  
4444444444444444447  
4444444444444444448  
4444444444444444449  
44444444444444444410  
44444444444444444411  
44444444444444444412  
44444444444444444413  
44444444444444444414  
44444444444444444415  
44444444444444444416  
44444444444444444417  
44444444444444444418  
44444444444444444419  
44444444444444444420<br

<u>Tank Designation</u>	<u>Volume Per Tank (Gals.)</u>	<u>Usage</u>
ST-1	7,686	Waste/Product Storage and Fuel Blending
ST-2	10,380	Waste/Product Storage and Fuel Blending
ST-3	11,177	Waste/Product Storage and Fuel Blending
ST-4	10,981	Waste/Product Storage and Fuel Blending
ST-5	7,686	Waste/Product Storage and Fuel Blending
ST-6	7,686	Waste/Product Storage and Fuel Blending
OS-1	62,375	Waste/Product Oil Storage
OS-2	62,375	Waste/Product Oil Storage and Fuel Blending
HT-1	19,828	Heat/Treatment and Waste/Product Oil Storage
HT-2	19,828	Heat/Treatment and Waste/Product Oil Storage
HT-3	19,828	Heat/Treatment and Waste/Product Oil Storage
HT-4	19,828	Heat/Treatment and Waste/Product Oil Storage
CB-1	21,401	Oily Waste Treatment/Holding Tank
CB-2	21,401	Oily Waste Treatment/Holding Tank
CB-3	21,401	Separated Water Treatment Tank
CB-4	21,401	Sludge/Water Holding Tank
VR-1	5,875	Waste Storage
VR-2	5,287	Waste Storage
VR-3	5,287	Waste Storage
LS-1	10,528	Lime Slurry Storage Tank
BFS-1	17,000	Boiler Fuel Storage Tank
BFS-2	1,500	Boiler Fuel Storage Tank
RT-1	5,875	Recirculation Tank

SOLID WASTE MANAGEMENT UNIT REVIEW

SHMU No.: 2

Type: 600 Drum Storage Area

Unit Description: The drum area is also diked with concrete and is attached to the Tank Storage and Treatment Area.

9 2 3 2 2 0 0 0 0 7 0

Date of Start Up: 8-24-84

Date of Closure: active

Method of Closure:

Waste Description: All types of waste are stored subject to compatibility.  
See the attached supplemental permit (page 47)

SOLID WASTE MANAGEMENT UNIT EVALUATION

SWMU No.: 3 Type: Containerized Storage in Van Trailers

Unit Description: This unit is southwest of the 600 drum storage area and consists of an asphalt pad with a 2 inch berm that will hold 10 trailers with approximately 80 drums per trailer. The area is about 50'x 90'.

9 2 3 2 2 0 0 0 8 7 1

Date of Start Up: March 10, 1988

Date of Closure: active

Method of Closure: \_\_\_\_\_

Waste Description: Same as SWMUs 1 and 2

SOLID WASTE MANAGEMENT EVALUATION

SWRU No.: 4 Type: Shedder Unit

Unit Description: Shed - pass AZ-15 with 160 drum storage and 5 550 gallon process liquid waste storage tanks

9 2 3 2 2 0 0 0 3 7 2

Date of Start Up: March 1988

Date of Closure: Sept. 1, 1988

Method of Closure: Burned up. Insurance company is investigating.  
At this time, cause of fire is still UNKNOWN.

Haste Description: Consumer products (aerosol cans, etc.)

SOLID WASTE MANAGEMENT UNIT

SHMU No.: 5 Type: Roll-off boxes

Unit Description: One 15 cubic yard and one 20 cubic yard  
(see pictures)

Date of Start Up: UNKNOWN

Date of Closure: active

Method of Closure: \_\_\_\_\_

Haste Description: 15 cubic yard holds metals while 20 cubic yard  
holds miscellaneous debris

SOLIDUS SILENTIAE. ELOCUTUS EST ALIUS.

SHMU No.: 6 Type: drum crusher

Unit Description: (see picture)

卷之三

Date of Start Up: UNKNOWN

Date of Closure: active

Method of Closure: \_\_\_\_\_

[View Details](#) | [Edit](#) | [Delete](#)

Haste Description: drums that will go to metal recycler

Release Controls: A 5' dike exist around the 23 Tank Storage and Treatment area as well as the 600 Drum Storage area which enable these areas to hold 110% of their total volumes. Certain tanks and vessels in the Tank Storage and Treatment area are equipped with relief valves that pass vapors through a carbon absorber control device prior to release. The central drainage ditch that enters the canal can be blocked to intercept a spill.

History of Release: On 2-19-85, 150-200 gallons of 28% caustic was lost to the Sanitary and Ship Canal when a barge hose ruptured. They reported 95% clean-up. In July of 1988, a reaction in a trailer sent approximately 5 pounds of lithium aluminum hydride into the air. On September 1, 1988, the Shredder Unit fire created another air release.

Observed/Potential Releases

Soils: No soils exist on site. The site sits directly on top of Niagara dolomite. No observed releases were noted.

Groundwater: Although the Niagara dolomite has fractures, the diked areas would not permit such a release.

~~Visual or olfactory releases were noted.~~

Subsurface Gas: None noted

Surface Water: None noted

Exposure Potential

Direct Contact: The exposure potential via direct contact is minimized by a 8 foot fence around the site other than the Canal and barge slip areas where a 5 foot shear would be encountered.

Groundwater Route: One mile south of the site a Lemon + public well is open to the Niagara dolomite (unrased from 128' - 241') continuous with the aquifer underlying Petrochem

~~dwellings. Within 4 miles of the site, there are greater than  
10,000 people.~~

Sensitive Environments: None noted

Suggested Further Act: RCRA inspections should continue

9 2 3 2 2 0 0 0 4 7 7

15,000 gallons of hazardous waste fuel (D001, F001, F003)  
per month. Since the facility started accepting waste in  
1984, only three minor releases have occurred. Overall, the  
facility is operating within RCRA regulations. Routes of  
contamination have been held in check by dikes, berms and  
air filtration canisters on certain vessels. Under CERCLA, the  
facility does not warrant a Screening Site Inspection

3  
2  
0  
0  
0  
0  
2  
2  
3  
2  
9

TJM:jab/sp87k

**Appendix A**

Petrochem Services, Inc  
Lemont, IL



SITE LOCATION

**Appendix B**

9 2 3 2 2 0 0 0 0 8 8 8

9 2 3 2 2 0 6 0 3 3 9

# Supporting

# Documentation

<u>Number</u>	<u>Document</u>	<u>Page</u>
001	Operating Permit # 1983-5-OP	33
002	Supplemental Permit # 1986-116-SP	47
003	Summary of 9-30-88 Inspection	65
004	Parts of IEPA DLPC File L0311620007	66
005	Flood Plain Insurance Map	68

9 2 3 2 2 0 0 0 6 9 0

# PE ROCHEN

Petrochem Services, Inc.

P.O. Box 337

Lemont Illinois 60439

(312) 739-1150

February 25, 1988

Illinois EPA  
Division of Land Pollution Control  
2200 Churchill Road  
P.O. Box 19275  
Springfield, IL 62794-9276

Attention: Mark Scholenberger

Reference: Revised Part A for Petrochem Services, Inc.

Dear Mark Scholenberger:

Enclosed please find a revised RCRA Part A Application for Petrochem Services, Inc. This revision is made in response to USEPA recommendations that this Part A Application be utilized in accordance with the procedures outlined in 40 CFR Part 270.72 (b) and (c).

It is further understood that no additional public notification is required for Petrochem Services, Inc. to change the volumes associated with tank storage capacities.

If you should have any questions or need additional information please feel free to call.

Sincerely,



Mark Schiefelbein  
Technical Services

MS:lw

Enclosure

cc: USEPA Region V, w/Enclosure

RECEIVED

MAR 1 1988

IEPA-DLPJ

CONTINUED FROM THE FRONT

VII. SIC CODES (Check in order of priority)

A. FIRST

7 4 4 6 9  
S U M

B. SECOND

7  
S U M

C. THIRD

7  
S U M

D. FOURTH

7  
S U M

VIII. OPERATOR INFORMATION

A. NAME

S P E T R O C H E M S E R V I C E S , I N C .

Is the name listed in Item VIII-A also the owner?  
 YES  NO

E. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other", specify.)

F = FEDERAL  
S = STATE  
P = PRIVATE

M = PUBLIC (other than Federal or State)  
D = OTHER (Specify)

P  
M

G. PHONE (Area code & no.)

A 3 1 2 7 3 0 1 1 5 0

E. STREET OR P.O. BOX

P. O. B O X 3 3 7

F. CITY OR TOWN

L E M O N T

G. STATE

I L 6 0 4 3 0

H. ZIP CODE

I X. INDIAN LAND

Is the facility located on Indian lands?

YES  NO

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water)

B. PSD (Air Emissions from Proposed Sources)

9 N N/A

9 P

C. USE (Underground injection of Fluids)

D. OTHER (Specify)

9 U N/A

9 0 3 1 8 0 6 A A Y

(Specify) ILLINOIS AIR PERMIT

E. RCRA (Hazardous Waste)

F. OTHER (Specify)

9 R I L D 0 8 5 3 4 9 2 6 4

9 0 3 1 1 6 2 0 0 0 7

(Specify) ILLINOIS LAND PERMIT

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS (provide a brief description)

Petrochem Services, Inc. is a service contracting company specializing in oil and chemical industry cleaning, maintenance and emergency spill response. The Facility engages in various storage & treatment technologies of hazardous & non hazardous waste which results in the production of recycled materials, fuels, hazardous waste fuels, off spec oil and enhanced disposal streams. Petrochem also serves as a Generator, Transporter, Marketer and burner of hazardous waste fuels.

XIII. CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (Type or print)

George A. Smith

B. SIGNATURE

George A. Smith v. P.C.

C. DATE SIGNED

2/24/98

COMMENTS FOR OFFICIAL USE ONLY

2  
3  
4

'A Form 3810-1 (6-80) REVERSE

Please print or type in the unshaded areas only.  
(All unshaded areas are used for state info, i.e., 12 character Alpha.)

Form Approved OMB No. 1505-0008

FORM <b>3</b> RCRA	<b>U.S. ENVIRONMENTAL PROTECTION AGENCY</b> <b>HAZARDOUS WASTE PERMIT APPLICATION</b> Consolidated Permit Program (This information is required under Section 3005 of RCRA.)	I. EPA I.D. NUMBER <b>FILDO8534926411</b>
<b>FOR OFFICIAL USE ONLY</b>		COMMENTS
APPLICATION DATE RECEIVED APPROVED by _____ Date _____		

## II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below (mark one box only) to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

### A. FIRST APPLICATION (place an "X" below and provide the appropriate date)

1. EXISTING FACILITY (See instructions for definition of "existing" facility.  
Complete item below.)

YR	MO	DAY
8	08	20
11	11	11

FOR EXISTING FACILITIES. PROVIDE THE DATE (yr., mo., & day)  
OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED  
from the dates to the left)

### B. NEW FACILITY (Complete item below.)

YR	MO	DAY
7	11	11
11	11	11

FOR NEW FACILITIES.  
PROVIDE THE DATE  
(yr., mo., & day). OPERA-  
TION BEGAN OR IS  
EXPECTED TO BEGIN

### B. REVISED APPLICATION (place an "X" below and complete item 1 above)

1. FACILITY HAS INTERIM STATUS

2. FACILITY HAS A RCRA PERMIT

## III. PROCESSES - CODES AND DESIGN CAPACITIES

A. PROCESS CODE - Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process (including its design capacity) in the space provided on the form (Item III-C).

### B. PROCESS DESIGN CAPACITY - For each code entered in column A enter the capacity of the process.

1. AMOUNT - Enter the amount.

2. UNIT OF MEASURE - For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	CODE	DESIGN CAPACITY	PROCESS	CODE	DESIGN CAPACITY
---------	------	-----------------	---------	------	-----------------

Storage		Treatment	
CONTAINER (barrel, drum, etc.)	201	GALLONS OR LITERS	TANK
TANK	202	GALLONS OR LITERS	SURFACE IMPOUNDMENT
WASTE PILE	203	CUBIC YARDS OR CUBIC METERS	INCINERATOR
SURFACE IMPOUNDMENT	204	GALLONS OR LITERS	
Disposal			
INJECTION WELL,	D79	GALLONS OR LITERS	OTHER (Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided: Item III-C)
LANDFILL	D80	ACRES (or volume that would cover one acre to a depth of one foot) OR MECTARE-METER	T04
LAND APPLICATION	D81	ACRES OR HECTARES	GALLONS PER DAY OR LITERS PER DAY
OCEAN DISPOSAL	D82	GALLONS PER DAY OR LITERS PER DAY	
SURFACE IMPOUNDMENT	D83	GALLONS OR LITERS	RECEIVED

MAR 1 1988

UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G	LITERS PER DAY	V	ACRE-FEET	A
LITERS	L	TONS PER HOUR	B	NECTARE-METER	P
CUBIC YARDS	V	METRIC TONS PER HOUR	W	ACRES	S
CUBIC METERS	C	GALLONS PER HOUR	H	HECTARES	Q
GALLONS PER DAY	U	LITERS PER HOUR	N		

EXAMPLE FOR COMPLETING ITEM III (shown in line numbers X-1 and X-2 below): A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

C		DUP		E		F		G		H		I		J	
A. PRO- CESS CODE (from list above)		B. PROCESS DESIGN CAPACITY		FOR OFFICIAL USE ONLY		A. PRO- CESS CODE (from list above)		B. PROCESS DESIGN CAPACITY		FOR OFFICIAL USE ONLY					
1. AMOUNT (specify)		2. UNIT OF MEA- SURE (refer code)		1. AMOUNT		2. UNIT OF MEA- SURE (refer code)		1. AMOUNT		2. UNIT OF MEA- SURE (refer code)					
X-1	S02	600	G	5											
X-2	T03	30	E	6											
1	S01	85,800	G	7											
2	S02	435.734	G	8											
3	T01	354,861	G	9											
4	T04	45,000	H	10											
		50,000													

EPA I.D. NUMBER (Enter from page 6)			FOR OFFICIAL USE ONLY													
W 20 28	W 21 29	W 22 30	DUP					DUP								
DESCRIPTION OF HAZARDOUS WASTES (CONTINUED)										WASTE TYPE						
W 20 28	A. EPA HAZARD MASTER (Enter codes)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEA- SURE (Enter codes)	D. PROCESSES					E. PROCESS DESCRIPTION (If code is not entered in D1111)							
				E. PROCESS CODES (Enter)					F. PROCESS DESCRIPTION (If code is not entered in D1111)							
1	F0001	2500	T	S	O	1	S	O	2	T	0	1	T	0	4	
2	F0002	2500	T	S	O	1	S	O	2	T	0	1	T	0	4	
3	F0003	2500	T	S	O	1	S	O	2	T	0	1	T	0	4	
4	D0001															Included with above
5	F0005	2500	T	S	O	1	S	O	2	T	0	1	T	0	4	
6	D0001															Included with above
7	K048	400	T	S	O	1	S	O	2	T	0	1	T	0	4	
8	D0008															Included with above
9	K049	1000	T	S	O	1	S	O	2	T	0	1	T	0	4	
10	D0008															Included with above
11	D0001															Included with above
12	D0003															Included with above
13	K050	100	T	S	O	1	S	O	2	T	0	1	T	0	4	
14	D0008															Included with above
15	K051	1000	T	S	O	1	S	O	2	T	0	1	T	0	4	
16	D0008															Included with above
17	D0001															Included with above
18	K052	400	T	S	O	1	S	O	2	T	0	1	T	0	4	
19	D0008															Included with above
20	D0001															Included with above
21	U0002	87	T	S	O	1	S	O	2	T	0	1	T	0	4	
22	D0001															Included with above
23	U0031	35	T	S	O	1	S	O	2	T	0	1	T	0	4	
24	D0001															Included with above
25	U019	35	T	S	O	1	S	O	2	T	0	1	T	0	4	
26	D0001															Included with above

A Form 2810-3 (6-80)

CONTINUE ON REVERSE

• VOTE PREVIOUSLY THIS FORM BEFORE SUBMITTING. DO NOT USE A COPY OF THIS FORM.									
CPA 8.0. MISC DATA (Enter from page 1)					FOR OFFICIAL USE ONLY, DO NOT WRITE ON THIS LINE				
W		DUP			W		DUP		
DESCRIPTION OF HAZARDOUS WASTES (continued)									

**DESCRIPTION OF HAZARDOUS WASTES (continued)**

FOR OFFICIAL USE ONLY. DO NOT FURNISH TO THE PUBLIC

D W P

11

DESCRIPTION OF HAZARDOUS WASTES			D.I.P.		D.U.P.	
W E H A Z A R D O U S T E N C E I D E C O D E	A. EPA HAZARD WASTECODE (Enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNITS OF MEA SURE ENTER CODE		D. PROCESSES	
			1. PROCESS CODES (Enter)	2. PROCESS DESCRIPTION (If code is not entered in D11)		
1	U064	90	T	S01S02T01T04		
2	U227	90	T	S01S02T01T04		
3	U118	90	T	S01S02T01T04		
4	U102	90	T	S01S02T01T04		
5	U096	90	T	S01S02T01T04		
6	U113	90	T	S01S02T01T04		
7	P004	2500	T	S01S02T01T04		
8	P006	90	T	S01S02T01T04		
9	P019	90	T	S01S02T01T04		
10	P007	90	T	S01S02T01T04		
11	P008	90	T	S01S02T01T04		
12	P009	90	T	S01S02T01T04		
13	P010	90	T	S01S02T01T04		
14	P012	90	T	S01S02T01T04		
15	K002	90	T	S01S02T01T04		
16	K003	90	T	S01S02T01T04		
17	K004	90	T	S01S02T01T04		
18	K005	90	T	S01S02T01T04		
19	K006	90	T	S01S02T01T04		
20	K007	90	T	S01S02T01T04		
21	K008	90	T	S01S02T01T04		
22	K022	90	T	S01S02T01T04		
23	K023	90	T	S01S02T01T04		
24	K024	90	T	S01S02T01T04		
25	K093	90	T	S01S02T01T04		
26	K094	90	T	S01S02T01T04		

A Form 3610-3 (2-80)

CONTINUE ON REVERSE

EPA ID NUMBER (same from page 1)			FOR OFFICIAL USE ONLY												
			WID DUP					DUP							
<b>IV. DESCRIPTION OF HAZARDOUS WASTES</b>															
1. EPA HAZARD WASTE NO. (or if listed) 12	2. ESTIMATED ANNUAL QUANTITY OF WASTE 1000's of lbs.	3. UNIT OF MEA- SUREMENT CODE	4. PROCESSES				5. PROCESS DESCRIPTION (If code is not entered in 5111)								
			1. PROCESS CODES (Enter)				2. PROCESS DESCRIPTION (If code is not entered in 5111)								
1 K025	90	T	S01	S02	T01	T04									
2 K029	90	T	S01	S02	T01	T04									
3 K095	90	T	S01	S02	T01	T04									
4 X096	90	T	S01	S02	T01	T04									
5 K083	90	T	S01	S02	T01	T04									
6 K104	90	T	S01	S02	T01	T04									
7 K032	90	T	S01	S02	T01	T04									
8 K035	90	T	S01	S02	T01	T04									
9 K041	90	T	S01	S02	T01	T04									
10 X099	90	T	S01	S02	T01	T04									
11 K062	90	T	S01	S02	T01	T04									
12 K087	90	T	S01	S02	T01	T04									
13 P005	90	T	S01	S02	T01	T04									
14 P010	90	T	S01	S02	T01	T04									
15 P013	90	T	S01	S02	T01	T04									
16 P028	90	T	S01	S02	T01	T04									
17 P021	90	T	S01	S02	T01	T04									
18 P022	90	T	S01	S02	T01	T04									
19 P029	90	T	S01	S02	T01	T04									
20 P030	90	T	S01	S02	T01	T04									
21 P031	90	T	S01	S02	T01	T04									
22 P039	90	T	S01	S02	T01	T04									
23 P040	90	T	S01	S02	T01	T04									
24 P071	90	T	S01	S02	T01	T04									
25 P063	90	T	S01	S02	T01	T04									
26 P064	90	T	S01	S02	T01	T04									

EPA Form 2510-3 16-801

CONTINUE ON REVERSE

Continued from page 2.  
NOTE: Photocopy this page before continuing if you have more than 25 wastes to list.

Form Approved OMB No. 1505-0009

EPA I.D. NUMBER (Enter from page 1)			FOR OFFICIAL USE ONLY		
W	I	D	W	DUP	
W	I	D	W	DUP	
IV. DESCRIPTION OF HAZARDOUS WASTES (CONTINUED)					
LINE NO. 12	A. EPA HAZARD WASTENO: (Enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEA- SURE (Enter code)	D. PROCESSES	
			1. PROCESS CODES (Enter)		2. PROCESS DESCRIPTION (If code is not listed in Item 1)
1	P 0 1 7 4	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
2	P 0 8 9	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
3	P 0 9 4	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
4	P 0 4 3	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
5	P 0 4 0	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
6	P 0 9 7	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
7	P 0 9 8	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
8	P 0 7 5	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
9	P 1 1 1	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
10	P 1 0 4	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
11	P 1 0 6	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
12	P 1 0 8	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
13	P 1 1 0	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
14	P 1 2 3	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
15	P 1 2 0	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
16	P 1 2 1	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
17	P 0 0 7	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
18	P 0 0 8	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
19	P 0 0 9	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
20	P 0 1 2	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
21	P 0 1 0	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
22	P 0 7 1	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
23	P 0 7 2	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
24	U 1 5 9	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
25	U 2 1 1	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
26	U 0 3 7	90	T	S 0 1 S 0 2 T 0 1 T 0 4	

EPA I.D. NUMBER (Enter from page 2)			FOR OFFICIAL USE ONLY		
			W	DUP	DUP
<b>IV. DESCRIPTION OF HAZARDOUS WASTES (Concluded)</b>					
LINE NO. 12	A. EPA HAZARD WASTE NO. (Enter codes)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEA- SURE (Enter codes)	D. PROCESSES	
	1. PROCESS CODES (Enter) T S O 1 S 0 2 T 0 1 T 0 4		2. PROCESS DESCRIPTION (If code is not found in table)		
1	U 0 1 4 8	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
2	U 0 5 5	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
3	U 2 4 0	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
4	U 0 7 8	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
5	U 0 7 9	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
6	U 0 8 1	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
7	U 0 8 2	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
8	U 0 8 7	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
9	U 0 9 2	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
10	U 0 0 1	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
11	U 1 1 2	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
12	U 1 1 7	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
13	U 1 2 2	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
14	U 1 2 3	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
15	U 2 1 3	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
16	U 1 2 5	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
17	U 1 2 7	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
18	U 1 2 8	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
19	U 1 3 3	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
20	U 1 3 4	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
21	U 1 4 0	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
22	U 1 4 4	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
23	U 1 2 9	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
24	U 1 3 7	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
25	U 1 5 1	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
26	U 1 5 4	90	T	S 0 1 S 0 2 T 0 1 T 0 4	

Continued from page 2.

NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

Form Approved OMB No. 1585-030002

EPA I.D. NUMBER (Enter from page 1)		FOR OFFICIAL USE ONLY				
W	L	D	W	DUP	W	DUP
IV. DESCRIPTION OF HAZARDOUS WASTES (continued)						
W NO. 12	A. EPA HAZARD WASTE NO. (Enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEA- SURE (Enter code)	D. PROCESSES		E. PROCESS DESCRIPTION <small>If a code is not entered in D1-D11</small>
				1. PROCESS CODES (Enter)		
1	U 2147	90	T	S 0 1 S 0 2 T 0 1 T 0 4		
2	U 226	90	T	S 0 1 S 0 2 T 0 1 T 0 4		
3	U 161	90	T	S 0 1 S 0 2 T 0 1 T 0 4		
4	U 162	90	T	S 0 1 S 0 2 T 0 1 T 0 4		
5	U 165	90	T	S 0 1 S 0 2 T 0 1 T 0 4		
6	U 169	90	T	S 0 1 S 0 2 T 0 1 T 0 4		
7	U 188	90	T	S 0 1 S 0 2 T 0 1 T 0 4		
8	U 190	90	T	S 0 1 S 0 2 T 0 1 T 0 4		
9	U 196	90	T	S 0 1 S 0 2 T 0 1 T 0 4		
10	U 204	90	T	S 0 1 S 0 2 T 0 1 T 0 4		
11	P 027	90	T	S 0 1 S 0 2 T 0 1 T 0 4		
12	U 208	90	T	S 0 1 S 0 2 T 0 1 T 0 4		
13	U 209	90	T	S 0 1 S 0 2 T 0 1 T 0 4		
14	U 213	90	T	S 0 1 S 0 2 T 0 1 T 0 4		
15	U 223	90	T	S 0 1 S 0 2 T 0 1 T 0 4		
16	U 228	90	T	S 0 1 S 0 2 T 0 1 T 0 4		
17	U 249	90	T	S 0 1 S 0 2 T 0 1 T 0 4		
18						
19						
20						
21						
22						
23						
24						
25						
26						

PART A LOG: A:79

SITE NO.: 0311620007

NAME : PETROCHEM

LSL/A ILD : ILD085349264

CITY : LEMONT

COUNTY : COOK

TYPE (LN, NW, PC, SG, SG, FE, CT) :

REVIEWER : NMS

DATE REC'D : 86/01/21  
DR/PARTS:

DATE TAILED: 86/03/14 PDS/LEN/FEI: 400  
REV.LN FTS:

PROCESSOR:	PROJECT A:	100/DEL 1:	SDV/DEL 1:
PROCESSOR:	PROJECT B:	100/DEL 2:	SDV/DEL 2:
PROCESSOR:	PROJECT C:	100/DEL 3:	SDV/DEL 3:
PROCESSOR:	PROJECT D:	100/DEL 4:	SDV/DEL 4:
PROCESSOR:	PROJECT E:	100/DEL 5:	SDV/DEL 5:
PROCESSOR:	PROJECT F:	100/DEL 6:	SDV/DEL 6:

COMMENTS:



Illinois Environmental Protection Agency · 2200 Churchill Road, Springfield, IL 62706

217/782-6762

Refer to: 0311620007 -- Cook  
Petrochem Services  
Permit File  
Log 1987-263

March 10, 1988

Petrochem Services, Inc.  
Attn: George A. Smith  
P.O. Box 337  
Lemont, IL 60439

Gentlemen:

This letter is to inform you that the Agency has revised your Operating Permit 1983-5-OP to include the following modifications:

- A. To allow fuel blending in Tanks ST-2, ST-3 and ST-5.
- B. To permit wastes with a vapor greater than 1.5 psia or with a flash point less than 100F to be stored or treated in Tanks OS-2, ST-1, ST-4 and ST-6.
- C. To increase the type of waste streams which can be accepted.
- D. To expand the drum crushing operation to cover empty drums received from off site.
- E. To allow containerized storage in van trailers.
- F. To allow additional consumer products to be accepted for the shredder unit.
- G. The clarification of site operations as outlined in your letter of February 18, 1988.

Additional modification requests to your operating permit were not granted because you have failed to provide proof that granting this permit would not result in violations of the Ill. Environmental Protection Act. Section 39(a) of the Illinois Environmental Protection Act (Ill. Rev. Stat., 1979, Ch. 111 1/2, par. 1039(a)) requires the Agency to provide the applicant with specific reasons for the denial of permit. The following reason(s) are given:

- A. In regards to dropping the list of solvents suitable for fuel blending or off-site incineration it was not the intent of the Agency to replace the supplemental waste stream system with the generic permit nor to allow the permittee to decide what wastes are suitable for fuel blending or off-site incineration without first consulting the Agency through the above mechanisms. Additionally, it was not felt that all wastes approved to be received were suitable for fuel blending due to their low BTU value, high flash point or classification as nonflammable. If these materials are to be recommended by the Agency they will be included in the revised permit.



Illinois Environmental Protection Agency • 2200 Churchill Road, Springfield, IL 62706

Page 2

1. justification why the material is better handled through fuel blending than off-site incineration.
2. what percentage of chlorine is in the fuel
3. a copy of the contract which allows chlorine at these levels in the fuel
4. how long are these type of wastes stored before they are blended
5. do the burner of these wastes have an air permit which allows this composition of fuel to be burned?

Additionally your revised closure plan dated February 26, 1985 and your revised part A dated February 25, 1988 have been reviewed and approved.

Should you wish to reapply or have any questions regarding this application, please contact Mark A. Schollenberger at 217/782-9799.

Very truly yours,

Lawrence W. Eastep, P.E., Manager  
Permit Section  
Division of Land Pollution Control

LWE:MS:mab/0207j/sp

Enclosures

cc: Northern Region  
Division File  
DAPC - Jim Cobb  
Compliance Monitoring  
Jeanetter Virgillo - RUI, Inc.

# Document 002



Illinois Environmental Protection Agency • 2200 Churchill Road, Springfield, IL 62706

217/782-6762

Refer to: 0311620007 -- Cook County  
Petrochem Services, Inc.  
ILD085349264  
Permit No. 1983-5-OP  
Log No. 1987-263 (1987-15, 1986-164 1986-39)

July 17, 1987  
Revised April 15, 1987  
Revised March 10, 1988

Petrochem Services, Inc.  
Attention: George E. Smith  
P.O. Box 337  
Lemont, IL 60439

Gentlemen:

Permit is hereby granted to the above facility to operate a waste site consisting of 17 acres in the N 1/2 of Section 21, Township 37 N. Range 11E, 3rd P.M. (as more fully described in the original application) to store, treat and/or reclaim waste, surplus or off-specification materials.

Final plans, specifications, application and supporting documents as submitted and approved shall constitute part of this permit and are identified on the records of the Illinois Environmental Protection Agency by the permit number(s) and log number(s) designated in the heading above.

This permit is issued subject to the standard conditions attached hereto and incorporated herein by reference and further subject to the following special conditions:

1. This permit allows Petrochem to operate the following units:

a:

Tank Designation	Volume Per Tank (Gals.)	Usage
ST-1	7,686	Waste/Product Storage and Fuel Blending
ST-2	10,380	Waste/Product Storage and Fuel Blending
ST-3	11,177	Waste/Product Storage and Fuel Blending
ST-4	10,981	Waste/Product Storage and Fuel Blending



Page 2

ST-5	7,686	Waste/Product Storage and Fuel Blending
ST-6	7,686	Waste/Product Storage and Fuel Blending
OS-1	62,375	Waste/Product Oil Storage
OS-2	62,375	Waste/Product Oil Storage and Fuel Blending
HT-1	19,828	Heat/Treatment and Waste/Product Oil Storage
HT-2	19,828	Heat/Treatment and Waste/Product Oil Storage
HT-3	19,828	Heat/Treatment and Waste/Product Oil Storage
HT-4	19,828	Heat/Treatment and Waste/Product Oil Storage
CB-1	21,401	Oily Waste Treatment/Holding Tank
CB-2	21,401	Oily Waste Treatment/Holding Tank
CB-3	21,401	Separated Water Treatment Tank
CB-4	21,401	Sludge/Water Holding Tank
VR-1	5,875	Waste Storage
VR-2	5,287	Waste Storage
VR-3	5,287	Waste Storage
WS-1	28,481	Water Storage Tanks
WS-2	28,481	Water Storage Tanks
LS-1	10,528	Lime Slurry Storage Tank
PT-1	550	Process Liquid Waste Storage from Shedding Unit ONLY
PT-2	550	Process Liquid Waste Storage from Shedding Unit ONLY



Page 3

PT-3	550	Process Liquid Waste Storage from Shedding Unit ONLY
PT-4	550	Process Liquid Waste Storage from Shedding Unit ONLY
PT-5	550	Process Liquid Waste Storage from Shedding Unit ONLY

b: Container Storage Areas

<u>Unit Designation</u>	<u>Volume</u>	<u>Usage</u>
Drum Storage Area 1	600 drums	Waste Drum Storage
Drum Storage Area 2	160 drums/ 55 gal drum	Waste Drum Storage for the Shredding System ONLY
Storage roll-off boxes	(1) 15 C.Y. (1) 20 C.Y.	Solid Waste Storage for landfill disposal
Containerized Storage in van trailers	(10) 80 drums/ 55 gal drum	Waste Drum Storage

c: Processing Units

- 1: Plate and frame filter press unit
  - 2: Boiler with Fuel Storage Tanks
  - 3: Heat Exchangers (2)
  - 4: Shed-pax AZ-15 shredder with conveyors, fire suppression,  
exhaust and liquid collection systems
  - 5: All corresponding sumps, pumps, piping controls, filters,  
loading and unloading areas and appurtenances.
- 2: Waste, surplus and off-specification materials for storage, treatment,  
recycling, blending into fuels, blending for off-site incineration or  
shredding for volume reduction shall be limited to the following:

a: Oils

- 1: engine lube oils
- 2: transmission fluids
- 3: hydraulic oils



Page 4

4. insulating fluids and coolant oils
5. metal working fluids (cutting, grinding, machine, rolling, stamping and quenching oils)
6. turbine oils
7. gear oils
8. greases
9. distillate and residual fuel oils
10. tallow
11. vegetable oils
12. paraffins
13. mineral oils
14. petroleum refining intermediates (cycle, decant and slop oils)
15. asphalt
16. sulfonate oil
17. oil/water separator wastes
18. bilge oil wastes
19. oily washwaters and bottoms of the above from barge and tank cleaning operations
20. spill clean-up residues of the above
21. pipeline interfaces and transmixes of the above

b. Solvents\*

Non-halogenated Aliphatics:

1. mineral spirits
2. napthas
3. paraffin solvents
4. plasticizers
5. styrene
6. jet fuel
7. gasoline
8. heptane
9. cyclohexane
10. hexane
11. kerosene
12. lacquer thinner
13. stoddard's solvent
14. turpentine
15. isoprene
16. pentane
17. hexene's
18. isopentane
19. methyl cyclohexane
20. isoctane

Halogentated Aliphatics:

1. tetrachloroethylene
2. trichloroethylene
3. methylene chloride
4. 1,1,1-trichloroethane
5. carbon tetrachloride
6. chlorinated fluorocarbons
7. chlorobenzene
8. 1,1,2-trichloro-1,2,2-trifluoroethane
9. orthodichlorobenzene
10. trichlorofluoromethane
11. dichlorobenzene

Non-halogenated Aromatics

1. xylene
2. benzene
3. toluene

Esters

1. ethyl acetate
2. vinyl acetate
3. dioctyl phthalate



Page 5

- |    |               |     |                       |
|----|---------------|-----|-----------------------|
| 4. | cumene        | 4.  | diethyl phthalate     |
| 5. | cresols       | 5.  | methyl acetate        |
| 6. | cresylic acid | 6.  | isobutyl acetate      |
| 7. | nitrobenzene  | 7.  | isopropyl acetate     |
| 8. | ethyl benzene | 8.  | isoamyl acetate       |
|    |               | 9.  | amyl acetate          |
|    |               | 10. | ethyl methyl acrylate |
|    |               | 11. | ethyl acrylate        |

Alcohols:

1. ethanol
2. ethylene glycol
3. butanol
4. isobutyl alcohol
5. methanol
6. isoamyl alcohol
7. tert amyl alcohol
8. cyclohexanol
9. diacetone alcohol
10. 2-ethyl-1-butanol
11. 2-ethyl-1-hexanol
12. ethyl butanol
13. isopropyl alcohol
14. 2-methyl 2-butanol
15. propanol
16. 2-methyl-1-propanol
17. n-octanol

Ketones:

1. acetone
2. MEK
3. MIBK
4. diacetone alcohols
5. acetophenone
6. diisobutyl ketones

\*This includes still bottoms from recovery, tank bottoms, washwaters and spill clean-up residues of the above.

## c. Hazardous waste from specific sources

1. DAF float - K048
2. slop oil emulsion solids - K049
3. heat exchange bundle cleaning sludge - K050
4. API separator (leaded) - K051
5. tank bottoms (leaded) - K052
6. ink formulation waste - K086

## d. Corrosive Waste

1. sodium hydroxide
2. potassium hydroxide
3. wastewaters and bottoms containing NaOH and KOH from tank or barge cleaning operations
4. sulfuric acid
5. phosphoric acid
6. wastewaters and bottoms from sulfuric and phosphoric acid storage tank cleaning operations



Page 6

e. Aerosol and non-aerosol products for the shredder system only:

1. soaps and detergents
2. alkaline cleaners
3. air fresheners
4. health and beauty aids
5. petroleum products
6. food products
7. paints and related products
8. construction products, i.e.: adhesives, cements, insulation

f. Additional solvents available only for storage, recycling, and off-site incineration:

1. creosote
2. 1-3 butylene glycol
3. propylene glycol
4. chloroform
5. perchloroethylene
6. 1,1,2-trichloroethane
7. dimethyl phthalate
8. di-n-butyl phthalate

3. This permit also allows for the temporary storage of wastes in containers (of those not identified above) resulting from emergency response spill clean-up for purposes of sampling, analysis and staging for off-site treatment, disposal, incineration or recovery.

d. Treatment, as permitted herein, is limited to:

a. Oil/hydrocarbon treatment system consisting of physical and chemical separation processes (clarification, coagulation, flocculation, flotation, decanting, sedimentation, filtration, chemical treatment, and heating) to remove and separate water and solids from the hydrocarbon phase of wastes, which shall also include the following pre-treatment processes:

1. Reactive waste neutralization for sulfides (maximum allowable concentration at 1000 ppm) in oils and oil/hydrocarbon mixtures using sodium hypochlorite as an oxidizing agent.
2. Reduction of hexavalent chrome contaminated cooling oils (maximum allowable concentration at 1000 ppm) utilizing sodium hydrosulfite.
3. Acid pre-treatment of oil and oil/water emulsions.

b. Acid/base neutralization.



Page 7

- c. Blending oils/hydrocarbon mixtures into supplementary fuels or for purposes of off-site incineration.
- d. Solids conditioning with lime (of wastes generated from other on-site processes).
- e. Solids dewatering (of waste generated from other on-site processes) using a plate and frame filter press.
5. Any wastes or materials with a vapor pressure greater than 1.5 psia or with a flash point less than 100F shall be stored or treated in the vapor controlled storage/treatment system consisting of tanks labeled OS-2, ST-1, ST-2, ST-3, ST-4, ST-5, ST-6, HT-4, CB-2, CB-3 and CB-4.
6. Reactive sulfide neutralization and hexavalent chrome reduction shall be conducted only in the tank designated as VR-1.
7. This facility cannot accept any wastes containing polychlorinated biphenols (PCBs) at a concentration greater than 10 ppm.
8. Each waste stream received for storage or treatment shall be analyzed and processed in accordance with the procedures described in the application to assure that:
  - a. The waste stream is properly classified; and
  - b. None of the following wastes are accepted for treatment:
    1. Reactive wastes (other than sulfide reactive oil mixtures with a sulfide content of 1000 ppm).
    2. Poisonous wastes as defined by 49 CFR, Part 173, Subpart H, Section 173.326 and Section 173.343.
    3. Any waste containing material regulated by the Federal Insecticide, Fungicide and Rodenticide Act, as amended.
9. The 3 Carbon Absorber Control devices on ST-1, ST-4, ST-6 shall be inspected weekly for deterioration and/or leakage.
10. This facility shall be operated in accordance with this Agency's Division of Air Pollution Control Permits.
11. All loading/unloading of special wastes shall be accomplished over spill containment devices.
12. Drums of special waste shall be stacked a maximum of two high on pallets.



13. All wastes received for fuel blending into the used oil program shall be analyzed for total halogen. To date, the only USEPA approved teste method for total halogens is ASTM method D808-81 (i.e. oxygen bomb followed by titrimetric halogen determination). Petrochem shall use the following rebuttal method for determining halogenated solvents in wastes received for blending into fuel to be marketed as used oil:

Used oil or wastes containing more than 1,000 ppm of total halogens is presumed to be hazardous waste unless adequately rebutted by the generators. It is important to note that simply showing that the amount of chlorinated solvents in the oil is less than 1,000 ppm by GC/MS analysis (i.e. SW-846 method 8240) is not an adequate rebuttal to the presumption. For example, if the oil has a total halogen concentration of 3,000 ppm (by ASTM method 808), and the GC/MS analysis indicates 800 ppm of trichloroethylene, the presumption has not been adequately rebutted. The generator must still (1) identify the source(s) of all of the 3000 ppm chlorine and (2) prove that the 800 ppm of trichloroethylene is not the result of mixing the oil with a listed hazardous waste. At a minimum, the rebuttal shall include (1) the concentrations of halogenated solvents as determined by GC/MS Test Methods (i.e. SW-846 method 8240), (2) if available, material safety data sheets for the waste. The MSDS's must include % chlorine in each waste and the source (i.e., chlorinated paraffins) (3) process descriptions of the operations generating the waste. The description should identify the operations (including those which use solvents) raw materials, and products which may introduce chlorine into the process and (4) the generator certification form. A copy of the rebuttals shall be submitted with the renewal application for generic permits.

14. QC Test 6 that was submitted to the Agency on January 22, 1987 shall replace the QC Test 6 for Group I Waste Quality Control Test 6 previously submitted and approved.
15. Special waste received at the site for storage and treatment/recovery shall be transported to the facility utilizing the Agency's supplemental waste stream permit or generic permit system and manifest system.
16. Special wastes generated at the site for disposal, storage, incineration or further treatment elsewhere shall be transported to the receiving facility utilizing the Agency's supplemental waste stream permit system and manifest system.
17. This permit is subject to review and modification by the Agency, as deemed necessary to fulfill the intent and purpose of the Environmental Protection Act, and all applicable environmental rules and regulations.
18. This permit is issued with the expressed understanding that no process discharge to waters of the State or to a sanitary sewer will occur from these facilities. If such discharge occurs, additional or alternate facilities shall be provided. The construction of such additional or



Illinois Environmental Protection Agency • 2200 Churchill Road, Springfield, IL 62706

Page 9

19. Any modification to the facility shall be the subject of an application for supplemental permit for site modification submitted to this Agency.
20. Permittee shall notify the Agency of any changes from the information submitted to the Agency in its application for a development and operating permit for this site. Permittee shall notify the Agency of any changes in the names or addresses of both beneficial and legal titleholders to the herein-permitted site. Such notification shall be made in writing within fifteen (15) days of such change and shall include the name or names of any parties in interest and the address of their place or abode; or, if a corporation, the name and address of its registered agent.
21. Drums received from off site for crushing which contained hazardous waste must be empty as defined in Section 721.107 of Subtitle C, when received.

Very truly yours,

Lawrence W. Eastep, P.E., Manager  
Permit Section  
Division of Land Pollution Control

LWE:MS:mab/207J/sp

Enclosures

cc: Northern Region  
Compliance Monitoring  
Division File  
Jeanette Virgillito, RUI, Inc.  
DAPC - Jim Cobb



Illinois Environmental Protection Agency • 2200 Churchill Road, Springfield, IL 62706

217/782-6752

Refer to: 0311620007 -- Cook  
Petrochem Services  
Permit File  
Log No's 1987-240, 1987-241

March 10, 1988

Petrochem Services, Inc.  
Attn: George A. Smith  
P.O. Box 337  
Lemont, IL 60439

Gentlemen:

This letter is to inform you that the Agency has revised your Generic Permit 1986-116-SP to include the following waste stream modifications:

- A. to replace waste stream components total water and total solids with the component bottom sediment and water for generic permits 000105 through 000118, 000172, 090010 and 090011.
- B. to increase the limit for the component, total halogenated solvent to 10% for generic permits 000112 and 000113.
- C. to increase the limits for the components; arsenic, cadmium, lead and chromium to 1% for generic permits 000105, 000106, 000108, 000110, 000111, 000114, 000115, 000116, 000117, 000172 and 090011.
- D. to add D001, D002, D003, D004 and D006 to USEPA Haz #'s for generic permits, 000106, 000111, 000114, 000115 and 000117.
- E. to add U057, U112, U107, U088, U031, U140, U159, U161, K086, D001, D002, D003, D004, D006, D007, and D008 to USEPA Haz #'s for generic permit 000108.
- F. to add D001, D002, D003, D004, D006, D007, D008 and F004 to USEPA Haz #'s for generic permit 000116.
- G. to add D002, D003, D004, D006, D007 and D008 to USEPA Haz #'s and remove the component chloride and increase to component total halogenated solvents to 10% for generic permit 000172.
- H. to add U057, U112, U107, U088, U031, U140, U159, U161, D001, D003, D004, D006, D007 and D008 to USEPA Haz #'s for generic permit 090011.
- I. to increase the solids component to 100% and water component to 95% and correct the treatment method for generic permits 000119 and 000120.
- J. to add silver as a component of generic permit 000174 and delete the component total halogenated solvent.

14439



Illinois Environmental Protection Agency • 2200 Churchill Road, Springfield, IL 62706

Page 2

- K: to add additional specific waste types for recovery.
- L: to grant a generic permit for RCRA empty drums.

Additional modification requests to your permit were not granted because you have failed to provide proof that granting this permit would not result in violations of the Illinois Environmental Protection Act (Ill. Rev. Stat., 1979, Ch. 111 1/2, par. 1039(a)) requires the Agency to provide the applicant with specific reasons for the denial of permit. The following reason(s) are given:

- A: In regards to creating a generic permit titled "used oil" and one title "waste, off-spec and surplus oil" as opposed to the one permit currently issued, the Agency does not see the need for this in running the generic permit program.

Should you wish to reapply or have any questions regarding this application, please contact Mark A. Schollenberger at 217/782-9799.

Very truly yours,

Lawrence W. Eastep, P.E., Manager  
Permit Section  
Division of Land Pollution Control

LWE:MS:mab/2073/sp

Enclosures

cc: Northern Region  
Division File  
DAPC - Jim Cobb  
Compliance Monitoring  
Jeanett Virgilio



Illinois Environmental Protection Agency . . 2200 Churchill Road, Springfield, IL 62706

217/782-6762

Refer to: 0311620007 -- Cook County  
Petrochem Services, Inc.  
ILD085349264  
Permit No. 1983-5-OP (Revised 7/17/86)  
Supplemental Permit No. 1986-116-SP  
Log No's 1987-240 & 1987-241 (1987-154, 1987-016, 1986-116)  
Expiration Date: July 17, 1989

July 17, 1986  
Revised August 28, 1987  
Revised March 10, 1988

Petrochem Services, Inc.  
Attn: George A. Smith  
Post Office Box 337  
Lemont, Illinois 60439

Gentlemen:

Supplemental Permit Number 1986-116-SP is hereby issued to the above facility, to accept for storage and/or pretreatment for purposes of recovery, recycling, blending into supplemental fuels or blending for off-site incineration and aerosol/non-aerosol product shredding the following wastes, surplus or off-specification materials from any IEPA registered generator on a generic basis:

A. \* For Recovery \*

1. Non-halogenated aliphatics including mineral spirits, naphthas, paraffin solvents, plasticizers, styrene, jet fuel, gasoline, heptane, cyclohexane (U057), hexane, kerosene, lacquer thinner, paint thinner, stoddard solvents, turpentine, isoprene, pentane, hexene, isoctane, isopentane and methyl cyclohexane (see attached Waste Stream Permit Nos. 000112 and 000117);
2. Non-halogenated aromatics including xylene (F003, U239), benzene (U019), toluene (F003, U220) cumene (U055), cresol (F004, cresylic acid (F004) creosote (U051), ethylbenzene (F003) and nitrobenzene (F004) (see attached Waste Stream Permit No. 000116);
3. Alcohols including ethanol; ethylene glycol; butanol (U031), isobutyl alcohol (U140) isomyl alcohol, tert-amyl alcohol, cyclohexanol, diacetone alcohol, 2 ethyl-1-butanol, 2-ethyl-1-hexanol, ethyl butanol; isopropyl alcohol; 1,3 butylene glycol, 2-methyl-2-butanol, propanol, 2-methyl-1-propanol; propylene glycol, n-octanol and methanol (U154) (see Waste Stream Permit No. 000113 and 000115);



Page 2

- 4: Ketones including acetone (F003, U002), MEK (F003, U159) cyclohexane, isophorene, acetophenone, diacetone alcohols, difisobutyl ketones and MIBK (F003, U161) (see attached Waste Stream Permit No. 000114);
- 5: Halogenated aliphatics (F001, F002) including tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, orthodichlorobenzene chloroform (U044), perchloroethylene, dichlorobenzene, 112 trichloroethane (U227) and trichlorofluoromethane (see attached Generic Waste Stream Permit No. 000118);
- 6: Esters including ethyl acetate (F003), vinyl acetate (D001), dioctyl phthalate (U107) methyl acetate, isobutyl acetate, isopropylacetate, isoamyl acetate, amyl acetate, ethyl methacrylate (U118), dimethyl phthalate (U102), di-n-butyl phthalate (U069), ethyl acrylate (U113) and diethyl phthalate (U088). (See Waste Stream Permit 000172).
- 7: Corrosive waste (D002): (See attached Waste Stream Permit NO. 000119).
- 8: Non-hazardous used; waste, off-spec and surplus oils. (See attached Waste Stream Permit 000110).
- 9: Hazardous used; waste, off-spec and surplus oils (K048, K049, K050, K051, K052, D005, D006, D007, DC08, D009, D010, D011). (See attached Waste Stream Permit 000111).

The oils\* permitted for acceptance under Generic Permits 000110 and 000111 are limited to the following:

engine tube oils	asphalts
transmission fluids	sulfonate oils
hydraulic oils	oil/water separator wastes
insulating fluids and coolant oils	bilge oil wastes
turbine oils	Petroleum refining intermediates: (cycle, decant and slop oils)
gear oils	metal working fluids: (cutting, grinding, machining, rolling, stamping and quenching)
greases	mineral oils
distillate and residual fuel oils	
tallow	
vegetable oils	
paraffins	



Page 3

**listed hazardous petroleum refinery wastes:**

1. DAF float -- K048
2. slop oil emulsion solids -- K049
3. heat exchange bundle cleaning sludge -- K050
4. API separator sludge -- K051
5. tank bottoms (leaded -- K052)

\* - This includes still bottoms, tank bottoms, barge bottoms, washwaters and spill clean-up residues.

**B. For Blending into Supplemental Fuels**

1. Non-hazardous used, waste, off-spec and surplus oils. (See attached Waste Stream Permit 000105).
2. Hazardous used, waste, off-spec and surplus oils (K048 thru K052, D005, D006, D007, D008, D009, D010, D011). (See attached Waste Stream Permit 000106).

The oils\* permitted for acceptance under Generic Permits 000105 and 000106 are limited to the following:

- |                                   |  |
|-----------------------------------|--|
| engine tube oils                  | asphalts   |
| transmission fluids               | sulfonate oils   |
| hydraulic oils                    | oil/water separator wastes   |
| insulating fluids and coolant     | sludge oil wastes  |
| oils                              | Petroleum refining intermediates:<br>(cycle, decant and slop oils)   |
| turbine oils                      | metal working fluids:<br>(cutting, grinding, machining,<br>rolling, stamping and quenching)  |
| gear oils                         | Listed hazardous petroleum refinery<br>wastes:<br>1) DAF float -- K048<br>2) slop oil emulsion solids -- K049<br>3) heat exchange bundle cleaning<br>sludge -- K050<br>4) API separator sludge -- K051<br>5) tank bottoms (leaded) -- K052 |
| greases                           |  |
| distillate and residual fuel oils |  |
| tallow                            |  |
| vegetable oils                    |  |
| paraffins                         |  |
| mineral oils                      |  |



Illinois Environmental Protection Agency • 2200 Churchill Road, Springfield, IL 62706

Page 4

3. Non-halogenated solvents and liquids \*\* including the following:  
(see attached Waste Stream Permits 000107 and 000108).

mineral spirits	napthas	paraffin solvents
plasticizers	styrene	jet fuel
gasoline	heptane	hexane
cresols	nitrobenzene	cresylic acid
vinyl acetate	ethyl acetate	diethyl phthalate
cyclohexane	dioctyl phthalate	benzene
cumene	xylene	ethylene glycol
toluene	ethanol	methanol
butanol	isobutyl alcohol	MIBK
acetone	MEK	Kerosene
lacquer thinner	paint thinner	stoddard's solvent
turpentine	isoprene	pentane
hexene	isoctane	isopentane
methylcyclohexane	ethylbenzene	isoamyl alcohol
tert-amyl alcohol	cyclohexanol	diacetone alcohol
2 ethyl-1-butanol	2 ethyl-1-hexanol	ethyl butanol
1isopropyl alcohol	2 methyl 2-butanol	propanol
2 methyl 1-propanol	N-octanol	cyclohexane
1isophorene	acetophenone	diisobutyl ketones
methyl acetate	isobutyl acetate	isopropylacetate
1isoamyl acetate	amyl acetate	ethyl methacrylate
		ethyl acrylate

Washes and sludges from the formulation of ink (K086).

4. Halogenated solvents and liquids \*\* including the following: (see attached Waste Stream Permit 00109.)

tetrachloroethylene	trichloroethylene
1,1,1 trichloroethane	methylene chloride
carbon tetrachloride	chlorobenzene
1,1,2-trichloro-1,2,2 trifluoroethane	orthodichlorobenzene
trichlorofluoromethane	dichlorobenzene

\*\* -- This includes still bottoms; tank bottoms; washwaters and spill clean-up residues.

C: Bulking/blending for off-site incineration

1. Non-halogenated solvents and liquids reference in Item A1 through A6 above. (See attached Waste Stream Permit 090011.)
2. Halogenated solvents and liquids reference in Item A-5 above. (See Waste Stream Permit 090010.)



Illinois Environmental Protection Agency • 2200 Churchill Road, Springfield, IL 62706

Page 5

D: For Treatment

1. Corrosive waste for neutralization (D002) including sulfuric acid, phosphoric acid, sodium hydroxide and potassium hydroxide. (See attached Waste Stream Permit 000120.)
2. Off-specification or scrap commercial products (D001) for shredding which shall be limited to the following:

- |                                |  |
|--------------------------------|--|
| a. Soaps and Detergents        | f. Air Fresheners  |
| b. Household Cleaners          | Shop Products (lube & penetrating oils, other petroleum base products) |
| c. Health and Beauty Aids      | Construction Products (adhesives, cements, sealants)                   |
| d. Food Products               |  |
| e. Paints and related Products |  |

(See attached Waste Stream Permit 000173).

3. Non-hazardous off-specification or scrap commercial products for shredding which shall be limited to the following:

- |   |  |
|---|--|
| a. Soaps and Detergents   | j. Construction Products (adhesives, cements, sealants)    |
| b. Household Cleaners   | k. Electronic Equipment and Components                     |
| c. Health and Beauty Aids   | l. Small household appliances                              |
| d. Food Products  | m. Construction building materials and hardware            |
| e. Paints and related Products<br>(thinners and removers)                 | n. Toys  |
| f. Pallets  | o. Confidential documents and records                      |
| g. Automotive equipment   | p. Other manufacturer and retail appliances and components |
| h. Air Fresheners   |  |
| i. Shop Products (lube & penetrating oils, other petroleum base products) |  |

(See attached Waste Stream Permit 000174).

E: For Crushing

"RCRA Empty" containers (see attached Waste Stream Permit 000208).

Final plans, specifications, application and supporting documents as submitted and approved shall constitute part of this permit and are identified on the records of the Environmental Protection Agency, Division of Land Pollution Control by the permit number(s) and log number(s) designated in the heading above.



Illinois Environmental Protection Agency • 2200 Churchill Road, Springfield, IL 62706

Page 6

The permit is issued subject to the standard conditions attached hereto and incorporated herein by reference, and further subject to the following special conditions:

1. An analysis of each waste stream accepted from each generator shall be maintained on file at this site for review by this Agency.
2. Special wastes received at this facility for storage, treatment and/or recovery shall be transported to the site under a properly completed manifest.
3. The specifications for each supplemental fuel blended on-site, including off-specification used oil fuels and hazardous waste fuels, shall be submitted to the Agency within thirty (30) days after the effective date of this permit. Should the type(s) of fuel blended on-site deviate from the initial submissions, Petrochem shall submit a report to the Agency, identifying the specifications for each supplemental fuel blended, prior to shipment off-site.
4. Oils contaminated with PCB's (greater than 50 ppm) or Dioxins are not permitted under this generic permit.
5. The name and address of any new marketer and/or burner of these blended fuels (includes specification oils; off-specification oils and hazardous waste fuels); along with documentation of certifications that each marketer and/or burner of hazardous waste fuels or off-specification used oil fuels has so notified USEPA and has received a Federal I.D. number, shall be submitted to the Agency prior to shipment off-site to that facility.
6. All waste stored at this site for further treatment elsewhere shall be transported to the receiving facility utilizing the Agency's supplemental permit system and manifest system.
7. Special wastes generated at the site for disposal, incineration or further treatment elsewhere shall be transported to the receiving facility utilizing the Agency's supplemental permit system and manifest system.
8. This facility shall report to the Agency, on quarterly basis, the total quantity from each generator of each of the generic wastes shown in the attachment to this permit that was received for processing. (See New Attached Report Form). In addition, Petrochem shall submit an inventory log for all materials and waste shipped off-site (see enclosed Inventory Report). This information shall be submitted along with the Quarterly Generic Report. The above reports should be sent to:

Compliance Monitoring Section  
Division of Land Pollution Control  
Illinois Environmental Protection Agency  
2200 Churchill Rd



14445  
Illinois Environmental Protection Agency • 2200 Churchill Road, Springfield, IL 62706

Page 7

This schedule for submission of these waste receipt reports shall be within 30 days of the end of each quarter (i.e., reports due by 30th day of January, April, July and October).

Except as modified above, this site shall be operated in accordance with the terms and conditions of Permit No. 1983-5-OP.

Very truly yours,

Lawrence W. Eastep, P.E.; Manager  
Permit Section  
Division of Land Pollution Control

LWE:MS:mab/0207j/sp

Attachments.

cc: Northern Region  
Division File  
Compliance Monitoring  
DAPC -- Jim Cobb  
Jeanette Virgilio, RUI, Inc.

SUMMARY

0311620007  
09/30/88

Petrochem Services, Inc. is a service contracting company specializing in oil and chemical industry cleaning, maintenance and emergency spill response. This facility receives hazardous and non-hazardous wastes from off site and blends and treats these wastes to produce hazardous waste fuel, off-specification used oil and on-specification used oil. (Little to no on-spec used oil is generated.) Sources of waste generated off site include cleaning tanker trucks and cleaning off site stationary tanks. This facility also operates an on site barge cleaning operation. They receive hazardous and non-hazardous wastes from IEPA (ERU)/DCI activities (spills, abandoned drums, etc.), Tox-Away (a government-sponsored Indianapolis, IN. project to handle the shipment and disposal of hazardous household wastes) and generators, for temporary storage, which are eventually going off site for incineration.

**HAZARDOUS WASTES GENERATED (RERICTED)****Hazardous Waste Fuel - D001, F003, F005**

- Generated by blending and treating hazardous and non-hazardous waste
- Rate of generation: 45,000 gallons per month
- Shipped off site approximately 3 times per week to Continental Cement (Hanibal, MO.) or Systech (Greencastle, IN.) for use as fuel in cement kilns
- Stored in tanks

**APPARENT DEFICIENCY NOTED:**

Containers of restricted hazardous waste are not marked to identify the date they entered storage.

100-1000  
NOV 15 1988

Document 004:

be completed and begin implementing said amendments no later than six months after such changes occur.

Petrochem will review its SPCC at least once every three years and will amend its SPCC Plan to reflect improvements in recognized spill prevention and control technologies which will be implemented to significantly reduce the likelihood of a spill or release.

All amendments to the SPCC plan will reviewed and certified by an independent Registered Professional Engineer.

Subpart 112.7-Guidelines for the preparation and implementation of a Spill Prevention Control and Countermeasure Plan.

Petrochem Services, Inc. has designed, constructed, maintains and operates its facility in a manner to minimize the possibility of a fire, explosion or any unplanned sudden or non-sudden release of oil, hazardous materials or waste, or the constituents of such materials or waste to the air, soil or surface water which could threaten human health or the environment. See Attachment B, for a list of materials which may be handled at Petrochem's facility.

(a). Petrochem's Lemont facility has only had one reportable incident at its facility since its inception in 1983. That incident was the loss of approximately 100 pounds of liquid caustic to the canal in 1985, due to a hose failure near the coupler fitting. The spill was immediately contained and cleaned-up by Petrochem and properly reported to the National Response Center and Illinois Environmental Protection Agency. No significant damage to the environment or risk to human health occurred as a result of this spill. Petrochem now over specifies its hoses and couplings for wayside work. All unused couplings are capped.

(b). Petrochem's tank farm storage area and drum storage area are entirely surrounded by concrete retaining walls to create areas equivalent to 110% of the total rated capacity of the storage vessels. This prevents loss of materials to the canal or soil. The greatest potential for loss of materials lies at the transfer points of materials from vehicles or vessels into the tank farm.

The unloading dock for the drum storage area is designed such that drums once placed on the dock will drain into the storage area within the retaining walls. Should they begin to leak inside of a delivery truck, or spill or rupture before crossing the threshold of the dock, spilled material would be contained in a 200 gallon spill containment/collection sump built into the asphalt drive at the base of the dock.

Lemon/Cook / Crude spill / Barge Hose / 28% caustic / 150 gal / ERU  
P.O. Box 337 / Ruptured /

Petroleum

2/19/85

Classification of incident Minor

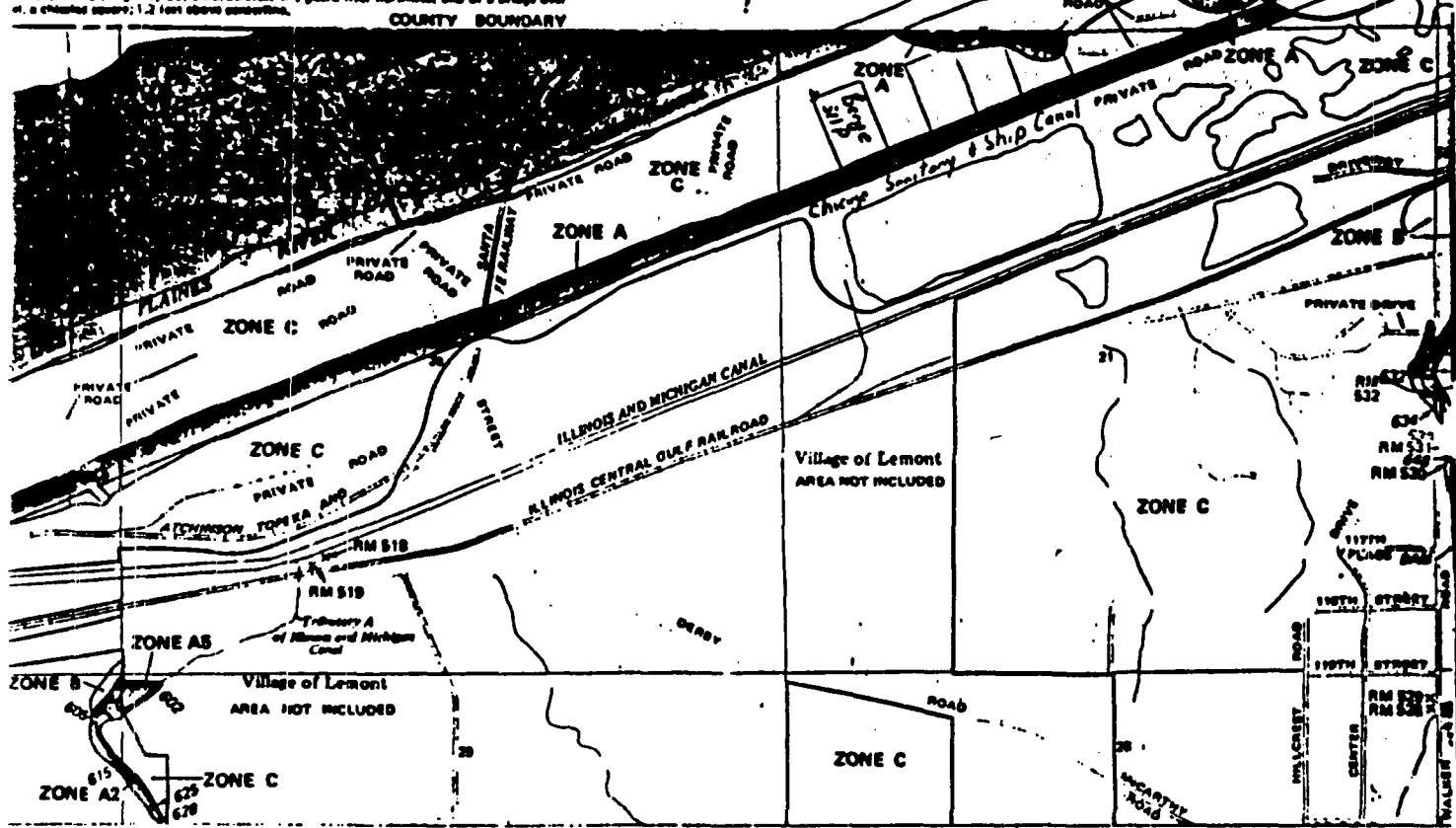
9 2 3 2 2 0 0 0 9-2-5

JJW R 128 A bent wire in west face of power pole in southeast quadrant at intersection of (north) one drive south, 0.3 feet above ground.

1 of section 1; T27W R11E; approx. 1,200 feet south of intersection of RM 6 and 6B on south concrete embankment of 1/2 over Big Creek on Atchison, Topeka and Santa Fe north track over bank.

should cover of section 22; T27W R12E; about 0.3 miles northeast of Illinois Highway 7; bridge of Illinois Highway 83; on southwest 1/2; ground river northwest end of a bridge over 1/2 a creek covered; 1.2 feet above concrete.

COUNTY BOUNDARY



Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine what insurance rates apply to structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program at (800) 636-6222 or (800) 424-6272.

Call this to receive entire map.

APPROXIMATE SCALE  
1000 FEET

#### NATIONAL FLOOD INSURANCE PROGRAM

### FIRM FLOOD INSURANCE RATE MAP

COOK COUNTY,  
ILLINOIS  
(UNINCORPORATED AREAS)

PANEL 165 OF 245  
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER  
170054 0165 B  
EFFECTIVE DATE:  
APRIL 15, 1981

federal emergency management agency  
federal insurance administration

#### 100-Year Flood Boundary

Zone Designation: Zone of Inundation  
Date: 12/27/79

#### 100-Year Flood Boundary

ZONE D

#### 500-Year Flood Boundary

----- 873 -----

#### Base Flood Elevation Line

WMA Elevation in Feet\*\*

88.287

Base Flood Elevation in Feet  
Where Uniform Depth Zone\*\*

Crevasse Reference Mark

RW7 X

River Miles

+ M1.5

\*\*Referenced to the National Geodetic Vertical Datum of 1929

#### \*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
AO	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AN	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
AE	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
D	Areas between Roads of the 100-year flood and 500-year flood, or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Diamond shading)
E	Areas of minimal flooding. (No shading)
S	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

#### NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

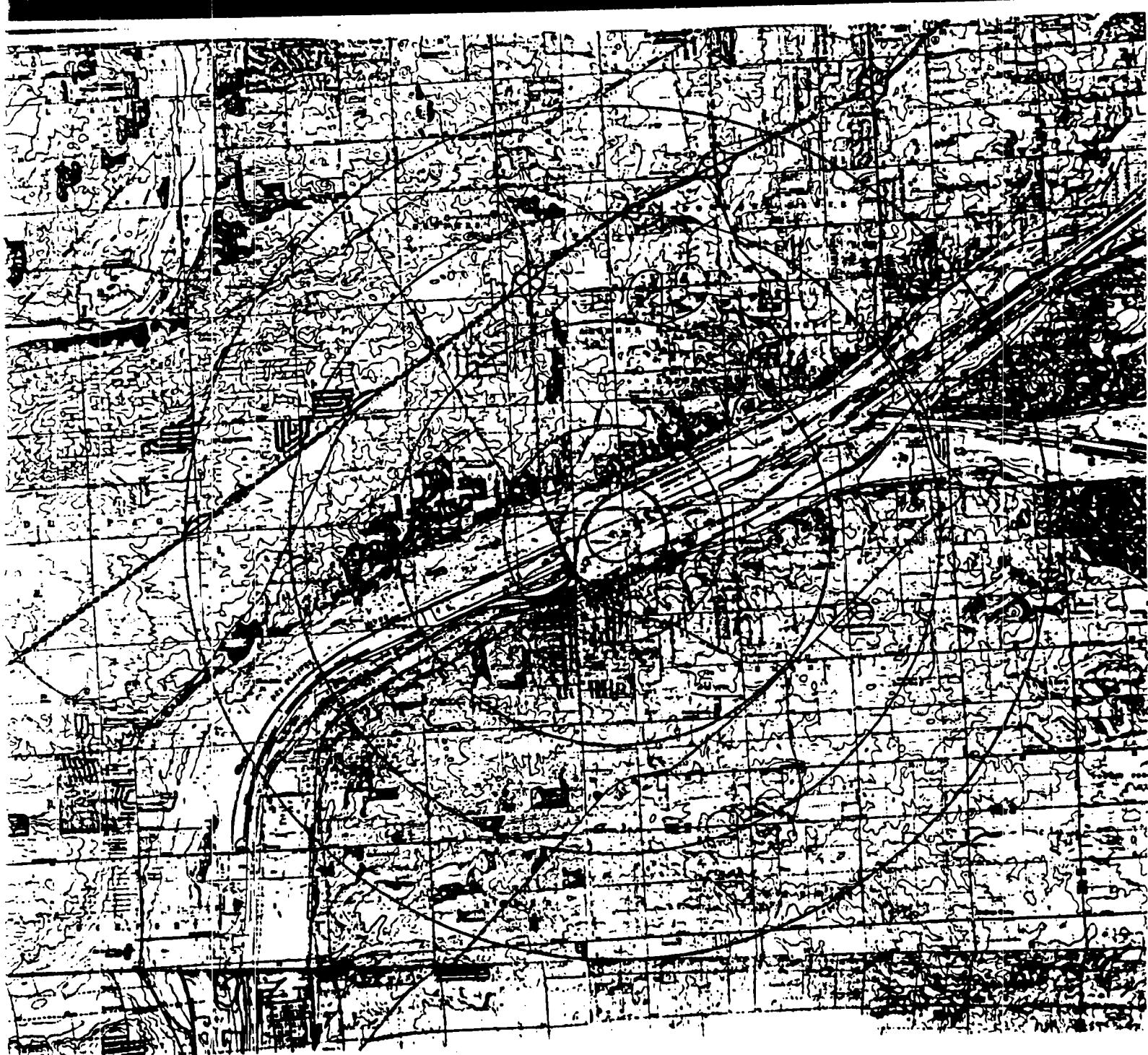
This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

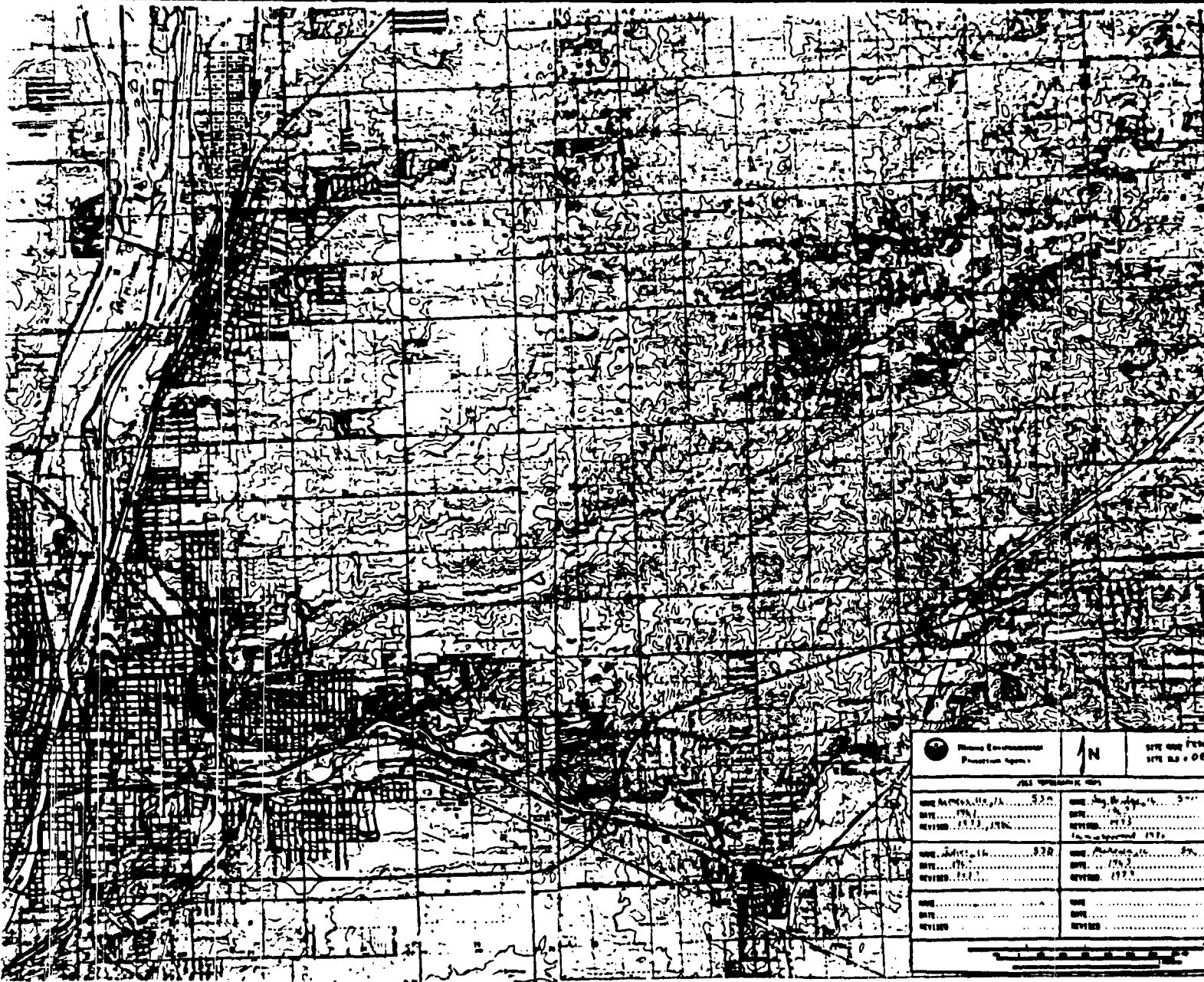
For additional map panels, see separately printed Index To Map Panels.

INITIAL IDENTIFICATION:  
MAY 27, 1977

#### FLOOD HAZARD BOUNDARY MAP REVISIONS:

FLOOD INSURANCE RATE MAP EFFECTIVE:  
APRIL 10, 1981  
FLOOD INSURANCE RATE MAP REVISIONS:

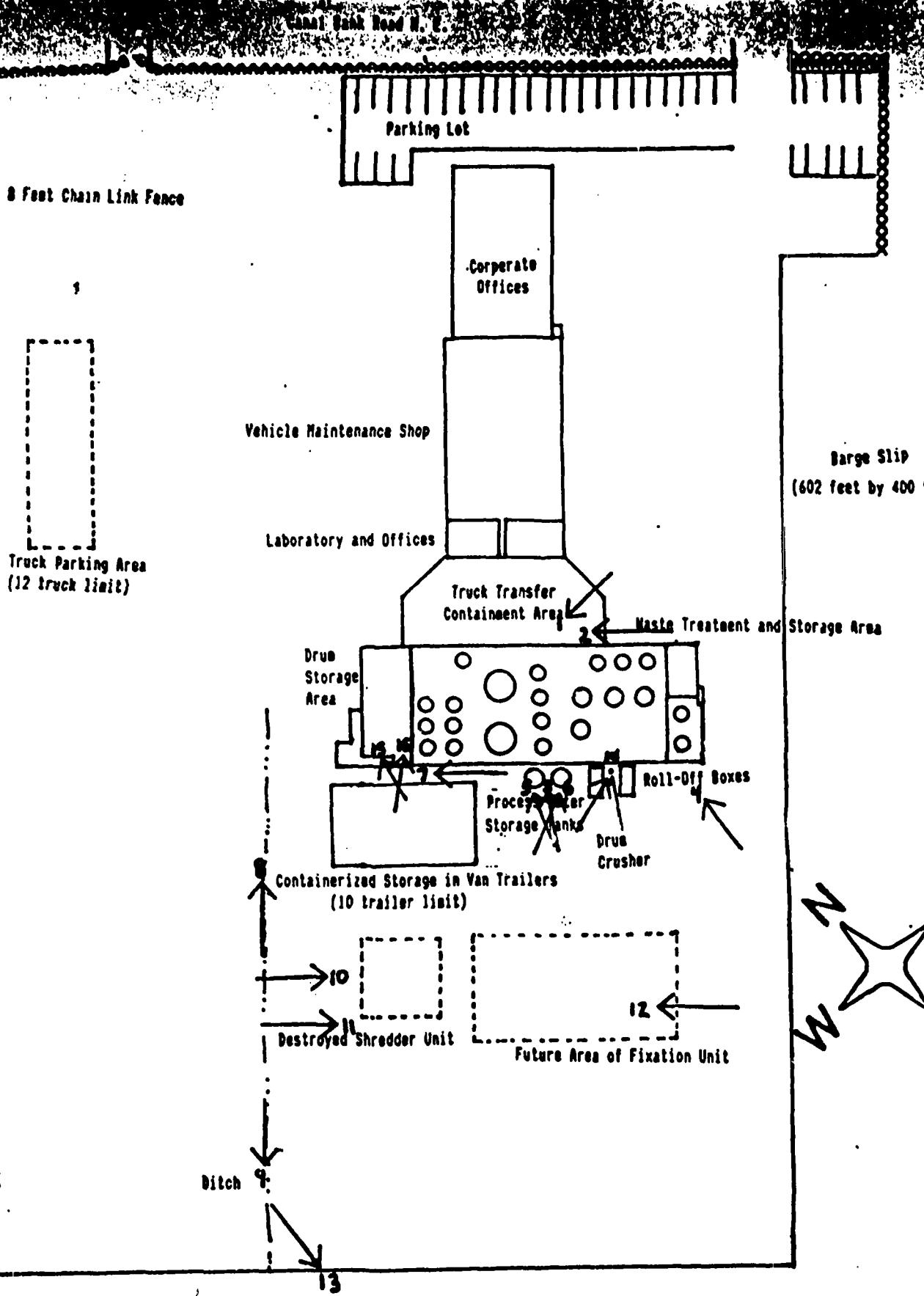




**Appendix C**

9 2 3 2 2 0 0 0 9 3 1

8 6 0 0 2 0 0 2 3 2



Chicago Sanitary and Ship Canal

Photograph locations

3-2 3 2 2 0 0 0 9 3 3

## PHOTOGRAPHS

DATE: 9 JAN 89

TIME: 1:00 pm

Photograph by:

Tim Murphy

Location:

Petrochem Services, Inc.

Canal Bank Rd N.E., Lemont

Comments: Picture taken toward  
the west of waste process  
storage and treatment area

Rob Watson of EPA on left

Mike Grafton of Heritage  
Environmental Services on  
right



DATE: 9 Jan 89

TIME: 1:00 pm

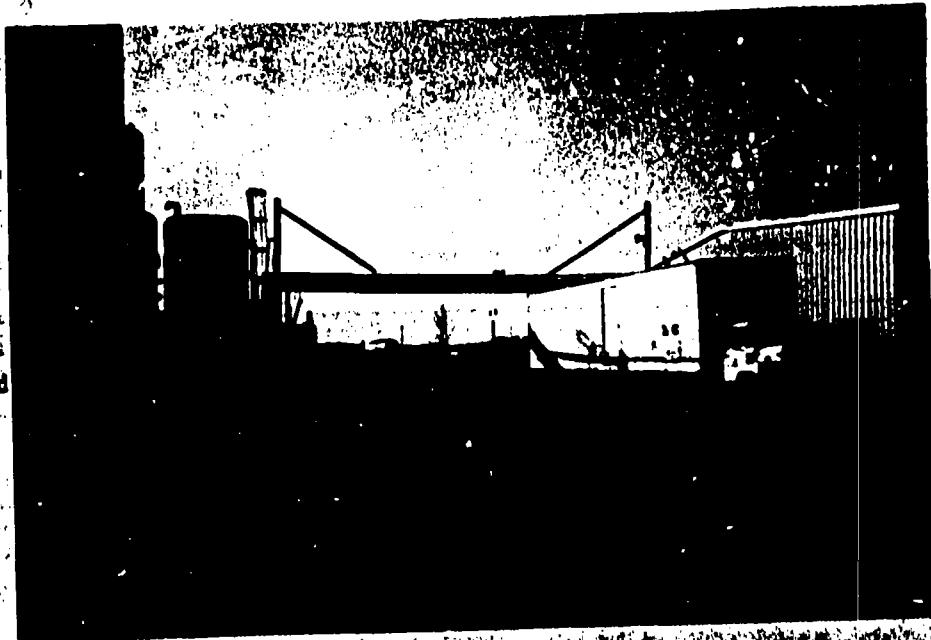
Photograph by:

Tim Murphy

Location: Canal Bank Rd N.E.

Lemont, Cook Co. IL

Comments: Picture taken toward  
the northwest of truck  
transfer containment area



(7-88-2) Rev. 1/88

DATE: 9 JAN 89

TIME: 1:00 pm

Photograph by:

Tim Murphy

Location:

Intertech Services, Inc.

Canal Bank Rd NE, Lemont

Comments: Picture taken toward

the northeast of process

Note storage tanks



3

DATE: 9 JAN 89

TIME: 1:00 pm

Photograph by:

Tim Murphy

Location: Canal Bank Rd NE

Lemont, Cook Co., IL

Comments: Picture taken toward

the North of waste process

storage and treatment area



4

(300-1097 Rev. 7/88)

DATE: 9 Jan 89  
TIME: 1:00 pm

Photograph by:

Tim Murphy

Location:

Petrochem Services, Inc.

Canal Bank Rd NE, Lemont

Comments: Picture taken toward  
the North Northeast with a  
process water storage tank in  
foreground and waste  
process storage and treatment  
area in background

5



9 2 0 0 0

DATE: 9 Jan 89  
TIME: 1:00 pm

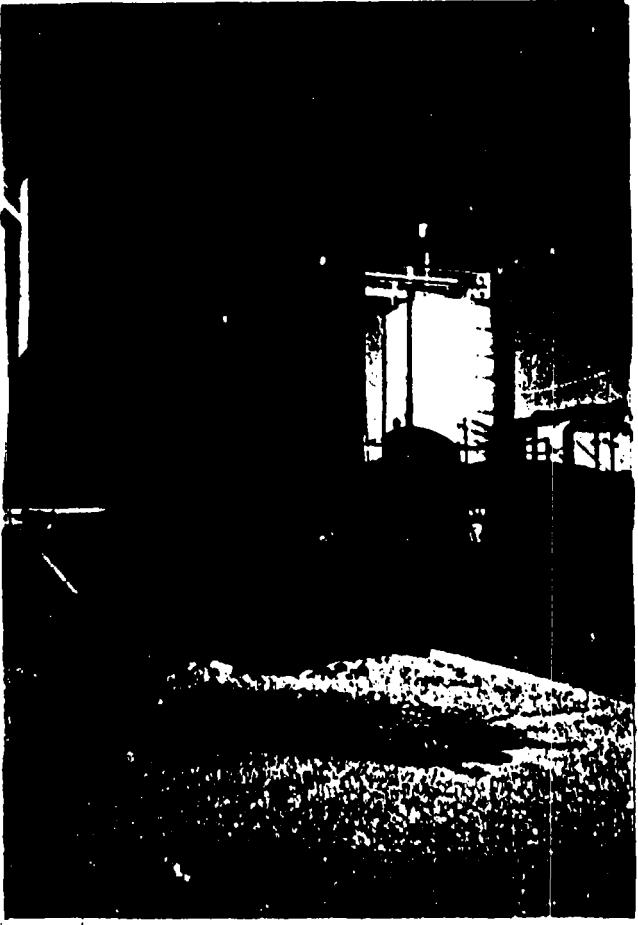
Photograph by:

Tim Murphy

Location: Canal Bank Rd. NE  
Lemont, Cook Co., IL

Comments: Picture taken toward  
the east Northeast with a  
process water storage tank in  
foreground and waste process  
storage and treatment area  
in background

6



2700-200 Rev. 7/88

DATE: 9 Jan 89

TIME: 1:00 pm

Photograph by:

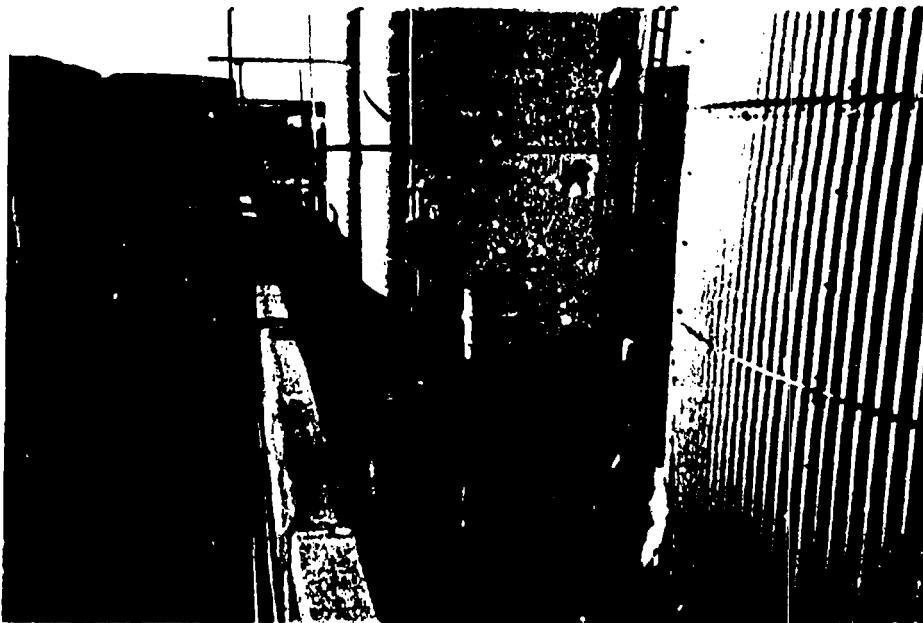
Tim Murphy

Location:

Petrochem Services Inc.

Canal Bank Rd NE, Lemont

Comments: Picture taken toward  
the northwest along diked  
wall of waste process storage  
and treatment area, trailer  
storage area on left



7

DATE: 9 Jan 89

TIME: 1:00 pm

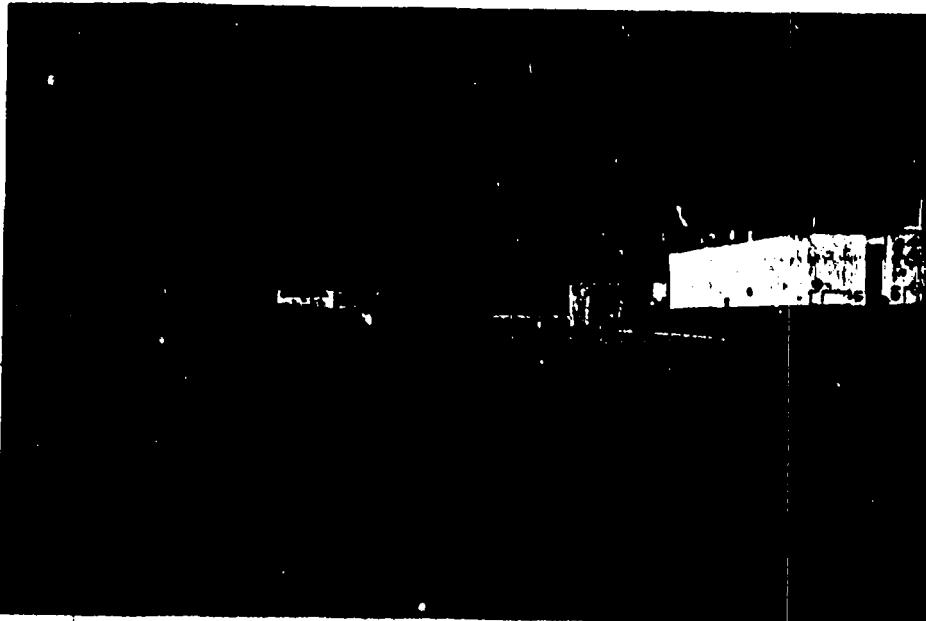
Photograph by:

Tim Murphy

Location: Canal Bank Rd NE

Lemont, Cook Co., IL

Comments: Picture taken toward  
the northeast of drainage  
ditch, trailer storage  
area on the right



8

SLR 322-1092

DATE: 9 Jan 89

TIME: 1:00pm

Photograph by:

Tim Murphy

Location:

Petrochem Services Inc

Canal Bank Rd NE, Lemont

Comments: Picture taken toward  
the southwest of drainage  
ditch going toward Sanitor.  
2nd strip ca. 2'



9

DATE: 9 Jan 89

TIME: 1:05pm

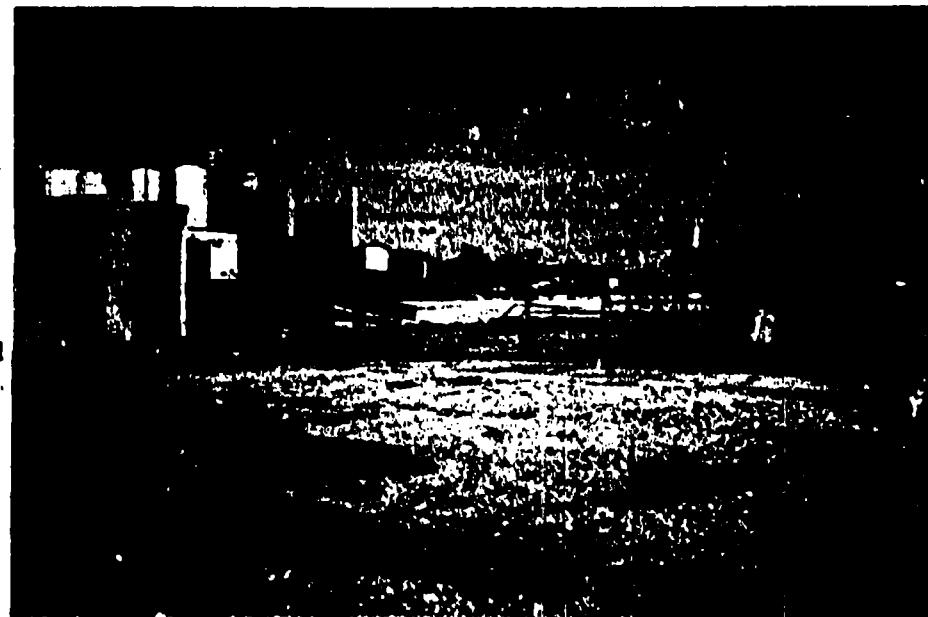
Photograph by:

Tim Murphy

Location: Canal Bank Rd NE

Lemont, Cook Co., IL

Comments: Picture taken toward  
the south southeast of  
burned shredder unit



10

DATE: 9 Jan 89

TIME: 1:00 pm

Photograph by:

Tim Murphy

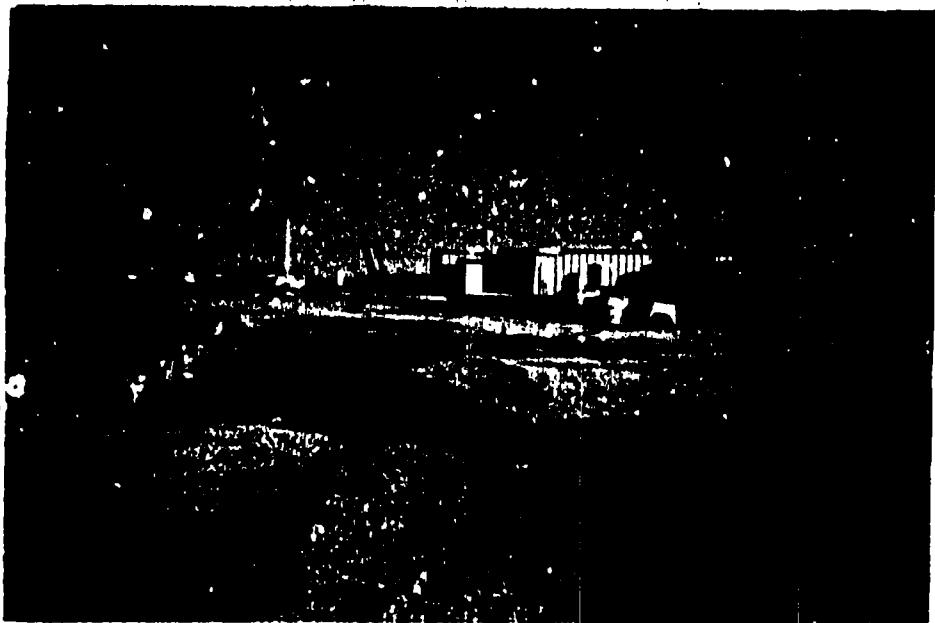
Location:

Petrochem Services Inc

Canal Bank Rd. N.E., Lemont

Comments: Picture taken toward

the southeast of south-  
west part of facility, part of  
burned shedder unit on  
left



11

DATE: 9 Jan 89

TIME: 1:00 pm

Photograph by:

Tim Murphy

Location: Canal Bank Rd. N.E.

Lemont, Cook Co., IL

Comments: Picture taken toward

the northwest of south-  
west part of facility  
where fixation unit is  
to be built, burned  
shedder unit in back-  
ground



12

ENR 2-20-89 Rev. 7/88

DATE: 9 Jan 89

TIME: 1:00 pm

Photograph by:

Tim Murphy

Location:

Petrochem Services Inc.

Canal Bank Rd NE, Lemont

Comments: Picture taken toward

the south southwest across

sanitary and surface canal

noting fractures in

limestone formation



13

DATE: 9 Jan 89

TIME: 1:00 pm

Photograph by:

Tim Murphy

Location: Canal Park Rd NE

Lemont, Cook Co., IL

Comments: Picture taken toward

the east northeast of

drum crushing unit



14

9 2 3 2 2 0 0 9 4 1

DATE: 9 Jan 89

TIME: 1:00 pm

Photograph by:

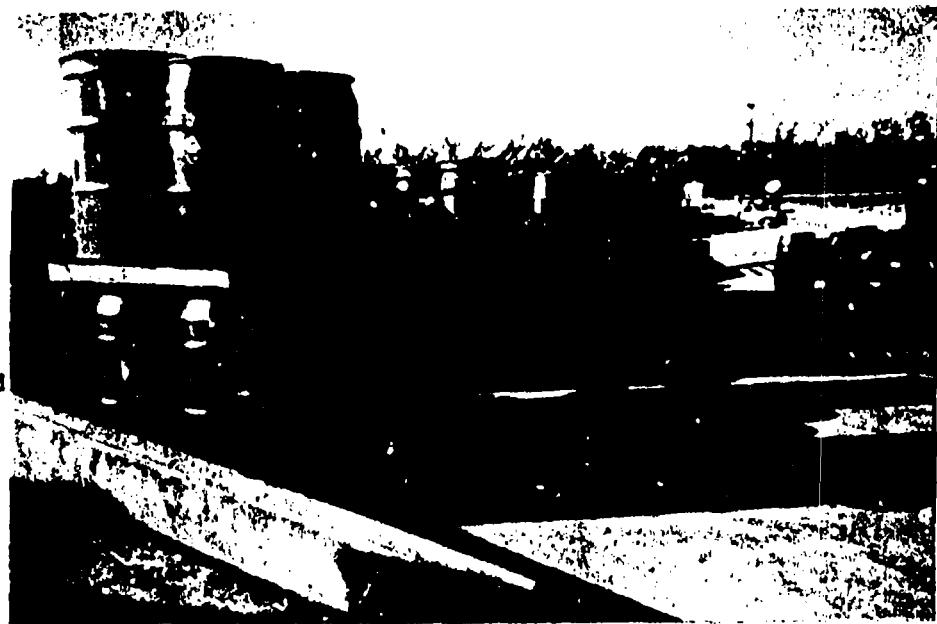
Tim Murphy

Location:

Petrochem Services Inc

Canal Bank Rd. NE, Lemont

Comments: Picture taken toward  
the North Northeast of  
the drum storage area



15

DATE: 9 Jan 89

TIME: 1:00pm

Photograph by:

Tim Murphy

Location: Canal Bank Rd. N.E.

Lemont, Cook Co., IL

Comments: Picture taken toward  
the Northeast of the drum  
Storage area



16

REFER TO:

WITHHELD LIST/ENVELOPE -- DOCUMENT NO. 20

9 2 3 2 2 0 0 0 9 4 2

**WITHHELD  
DOCUMENT**

FROM FILE CATEGORY: SF-HRS

DATED: 2-15-89

110-637-1678  
CFO-334-8/88